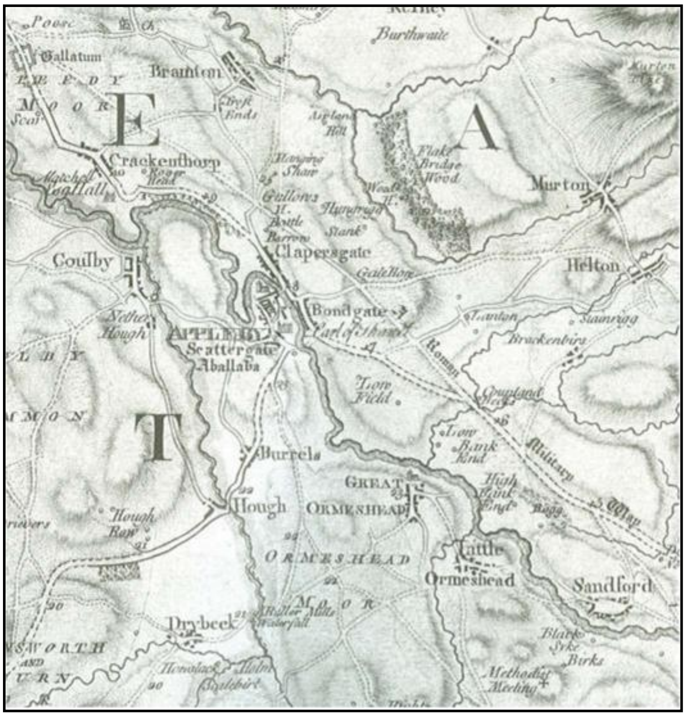
APPLEBY-IN-WESTMORLAND,
EDEN VALLEY,
CUMBRIA



Extract from Jeffrey's 1770 Map of Westmorland

DIG APPLEBY- BREAKING THE GROUND
Project Report
June 2017

LOTTERY FUNDED

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SUMMARY

This report presents the results of the first phase of a Community Archaeology Project, funded by the Heritage Lottery Scheme, focused on the town of Appleby-in-Westmorland, in the Eden Valley, Cumbria, with the project title 'Dig Appleby – Breaking the Ground'.

The first phase of the project took place between July 2016 and May 2017 focusing on evidence for the medieval town. These preliminary investigations were designed to inform the wider project, by helping to determine the archaeological potential of the town, focused primarily on the main street of Boroughgate and the adjacent medieval burgages.

The aims and objectives of the project were achieved through a program of documentary research and archaeological evaluation by project volunteers, comprising preliminary geophysical survey where suitable, followed by the excavation of a series archaeological trial trenches and test pits, sampling of archaeological deposits, recording, and reporting.

Copies of pertinent historical documents from the Cumbria Record Office were transcribed by volunteers following a series of palaeography sessions as part of the Dig Appleby project. A summary of the results of this research is included in this report, focusing on some of the earliest documents obtained relating to the town of Appleby-in-Westmorland and its occupants.

The archaeological investigations were undertaken over four weekends in July 2016, September 2016 and May 2017 and involved 10 days of fieldwork in total. Six separate locations were investigated across the town, including in some of the largest available gardens and open spaces on Boroughgate and a field at Castle Bank on the edge of town.

Archaeological remains of possible medieval and/or post-medieval date were found in six of the seven test pits excavated, and both the trenches. The remains identified in the test pits were limited to possible medieval or post-medieval surfaces and demolished post-medieval buildings/structures. The artefactual evidence recovered indicated past activity dating from the prehistoric to the modern periods, but focused on the medieval and post-medieval periods. Significant quantities of medieval pottery were recovered during the test pit excavations, which has particular relevance in terms of current phase of the project.

The two trenches excavated at Castle Bank successfully confirmed the presence of former buildings as depicted on Hill's 1754 Plan of Appleby-in-Westmorland, and indicate that earlier structures do survive in the less-developed parts of the town. A building of likely post-medieval date was identified, with evidence surviving for the walls and floors, with possible external paths and yards, enclosed by outer banks. Historic mapping suggests the buildings were demolished between the time of the 1843 Tithe map and the 1859 Ordnance Survey map, which is supported by the finds recovered.

The first phase of the Dig Appleby project has therefore successfully demonstrated the archaeological potential of the town and the potential that project has to contribute both to a greater understanding of the origins and development of the town of Appleby-in-Westmorland, and to a number of regional research objectives, which it is hoped will be achieved through future phases of the project.

As importantly the project has developed a network of project volunteers who have gained new skills and experience in a wide range of research activities, including palaeography, survey, archaeological excavation finds identification and recording. It is hoped that these will be developed further through future phases of Dig Appleby.

ACKNOWLEDGEMENTS

Appleby Archaeology Group are grateful to the Heritage Lottery Fund (HLF) for funding this project. The Group thank Mark Brennand of Cumbria County Council, and the staff at the Cumbria Record Office in Kendal for their assistance and support with the project. The Group also thank Andrew Connell, Martin Holdgate, and Chris Wilson for their advice and assistance throughout.

Appleby Archaeology Group also thank Lord Hothfield and the Trustees of St Anne's Hospital, David Lowis, Adrian Waite, Andrew and Charlotte Ratcliffe, Jim Knowles, David Johnson, Duncan Curley and Simon Barnham, for permitting the excavations on their properties.

Special thanks are due to all the volunteers who undertook the fieldwork and documentary research. The fieldwork was supervised by Martin Railton with Sue Thompson and Ed Johnson from Wardell Armstrong Archaeology, and additional help from Patricia Crompton. Documentary research and palaeography was led by Carol Dougherty, with contributions from Barbara Blenkinship and Carol Dougherty included in this report. The finds were assessed by Sue Thompson and environmental remains were assessed by Megan Stoakley from Wardell Armstrong Archaeology. The project was managed by Martin Railton who also wrote the report.

1 INTRODUCTION

1.1 Circumstances of the Project

1.1.1 This report presents the results of the first phase of a Community Archaeology Project focused on the town of Appleby-in-Westmorland, in the Eden Valley, Cumbria, with the project title 'Dig Appleby – Breaking the Ground'. It has been prepared on behalf of Appleby Archaeology Group who has facilitated the project in cooperation with local community groups and volunteers. The project has been funded by a grant from the Heritage Lottery Fund (HLF).

1.1.2 Appleby-in-Westmorland is situated in a loop of the River Eden in the Upper Eden Valley, in that part of Cumbria that was formerly known as Westmorland, the town of Appleby formerly being County town of Westmorland (Figure 1). The Eden Valley is a soft lowland landscape of undulating mixed farmland and woodland with distinct villages constructed of red sandstone or limestone. The valley contains some of the richest agricultural land in Cumbria, framed by the North Pennines to the east, and the rugged Cumbrian High Fells and Orton fells to the west, merging with the flatter land of the Carlisle fringe and the Solway Basin to the north (Countryside Commission 1998).

1.1.3 The earliest settlement at Appleby-in-Westmorland, appears to have been on the east side of the River Eden, in the area now known as Bongate (HER 4937). It is believed that a Danish manor and village were situated in this area. This was held by Scotland at the time of the Norman Conquest. However, King William Rufus took Carlisle in 1092, and it is believed that a motte and bailey was constructed in Appleby-in-Westmorland soon after (Holdgate 2006, 13).

1.1.4 The Norman town of Appleby-in-Westmorland was subsequently laid out in the loop of the river to the west of Old Appleby. The axis of the new town was the main street of Boroughgate, which it is believed originally ran from the castle bailey in the south (the highest point in the town), to the church in the north, with long strips of land or 'burgages' laid out either side.

1.1.5 From the end of the 12th century, and throughout the 13th century, Appleby-in-Westmorland prospered as a centre of trade, linked to the surrounding countryside through its market focused on Boroughgate. However, by the end of the 14th century a combination of plague, climate change and Anglo-Scottish disputes left large parts of the town in ruins, and it took until the 16th century to recover (Holdgate 2006, 103-104).

1.1.6 The aim of the Community Archaeology Project is to provide further information on the possible origins and development of Appleby-in-Westmorland, which is currently not well-understood. There has been very little previous archaeological research undertaken within Appleby-in-Westmorland, due largely to the lack of modern development within the historic core of the town. However, the limited investigation that has taken place suggests that archaeological remains survive both within the town and in the surrounding landscape.

1.1.7 The Dig Appleby project will provide an opportunity to identify and record the presence archaeological remains relating to the early history of the former county town, and help document the development of the town in the medieval and post-medieval periods. It is expected that this will be achieved through a programme of documentary research, survey, and archaeological investigation, undertaken primarily by members of the Appleby Archaeology Group and other project volunteers.

1.1.8 The first phase of the project, named 'Breaking the Ground' was undertaken in 2016/17 and with the focus on identifying any surviving evidence for the Norman settlement, through a number of small-scale investigations focusing on the historic town core. It is hoped that this work will provide sufficient information to develop a more focused project to investigate specific areas of the town in future phases.

1.2 Project Documentation

1.2.1 The project conformed to a brief prepared by Appleby Archaeology Group (Railton 2015). The brief was produced to provide a specific methodology based for a programme of archaeological trial trench evaluation/test pit investigation.

1.2.2 Full details of the wider project are provided in the original project proposal document, dated 6th March 2015 (Appleby Archaeology Group 2015).

2 METHODOLOGY

2.1 Standards and guidance

2.2.1 The archaeological fieldwork was undertaken following the Chartered Institute for Archaeologists *Standard and Guidance for archaeological field evaluation* (CIfA 2014a). The fieldwork programme was followed by an assessment of the data as set out in the Standard and Guidance for archaeological field evaluation (CIfA 2014a) and the Standard and Guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2014b).

2.2 Documentary Research

2.2.2 Preliminary desk-based research was undertaken by Appleby Archaeology Group in 2015 in order to establish the archaeological and historical background of the town of Appleby-in-Westmorland (Appleby Archaeology Group 2015). This provided information on the location and significance of all known and potential heritage assets up to 1km from the area of investigation.

2.2.3 This preliminary desk-based research involved consultation of the Cumbria Historic Environment Record (HER) to obtain information on known cultural heritage sites and archaeological remains, including previous fieldwork reports and published sources. The Cumbria Record Office in Kendal was also visited to obtain copies of readily-available historic maps of the town. Various online resources were also consulted including the National Monuments Record and National Heritage List held by Historic England.

2.2.4 On 10th April 2016 project volunteers visited the Kendal Record Office in order to inspect early documents relating to the town of Appleby-in-Westmorland, with the assistance of centre staff. Copies of pertinent documents were obtained for further study and were transcribed by volunteers following a series of palaeography sessions as part of the Dig Appleby project, led by Carol Dougherty from Appleby Archaeology Group. A summary of the results of this research is included in this report, focusing on some of the earliest documents obtained relating to the town of Appleby-in-Westmorland and its occupants.

2.2.5 The project has also benefitted from the ongoing research by members of the Appleby-in-Westmorland Society, who kindly shared some of their research into the history of the town during the course of the project. This included information provided by Chris Wilson on the former Appleby burgages.

2.3 Scope of the Fieldwork Project

2.3.1 The first phase of the fieldwork for the Dig Appleby project known as 'Breaking the ground' took place between July 2016 and May 2017 focusing on evidence for the medieval town, and involved 10 days of fieldwork in total. These preliminary investigations were designed to inform the wider project, by helping to determine the archaeological potential of the town, focused primarily on Boroughgate and the adjacent burgages.

2.3.2 The aims and objectives of the project were achieved through a program of archaeological evaluation, comprising preliminary geophysical survey where suitable, followed by the excavation of a series archaeological trial trenches and test pits, sampling of archaeological deposits, recording, and reporting.

2.3.3 The work was undertaken primarily by project volunteers under the supervision of professional archaeologists from Wardell Armstrong Archaeology, with the fieldwork project being managed by Martin Railton, BA (Hons) MA MCIfA.

2.4 Project Set-up

2.4.1 Project set-up included the identification of suitable locations within the town for the archaeological work, and consultation with the various landowners, which was undertaken by Appleby Archaeology Group. Analysis was undertaken of historic town maps in order to determine the best locations for surveys, trenches and test pits. The trench/test pit location plan was created using AutoCAD software.

2.5 Geophysical Survey

2.5.1 Geophysical survey was undertaken at two locations to help determine the locations of test pits and trenches, using both geomagentic and earth resistance techniques. A survey grid was established over each area, and tied-in to known Ordnance Survey points using a Trimble M3 Geodimeter total station with datalogger.

2.5.2 Geomagnetic measurements were determined using a Bartington Grad601-2 dual gradiometer system, with twin sensors set 1m apart. The survey was undertaken using a zig-zag traverse scheme, with data being logged in 30m grid units. A sample interval of 0.25m was used, with a traverse interval of 1m, providing 3,600 sample measurements per grid unit. The data was downloaded onto a laptop computer for data processing and storage in the field using specialist software.

2.5.3 Measurements of earth resistance were determined using a Geoscan RM15 Resistance Meter, with twin probes set 0.75m apart. The survey was undertaken using a zig-zag traverse scheme, with data being logged in 20m grid units. A sample interval of 1m was used, with a traverse interval of 1m, providing 400 sample measurements per grid unit. This data was also downloaded on site into a laptop computer for processing and storage.

2.5.4 Geophysical survey data were processed using Terra Surveyor software, which was used to produce 'grey-scale' images of the raw data. Positive magnetic anomalies are displayed as dark grey, and negative magnetic anomalies are displayed as light grey. A palette on the survey plan shows the relationship between the grey shades and geomagnetic values in nT.

2.5.5 For the resistance data, areas of anomalously high resistance are displayed as dark grey, and areas of anomalously low resistance as light grey. The palette bar shows the relationship between the grey shades and earth resistance values in ohms.

2.5.6 Raw data was processed in order to further define and highlight the archaeological features detected. The resulting grey-scale images were combined with site survey data and Ordnance Survey data to produce geophysical survey plans (Figure 4 &

Figure 5). An interpretation of the geomagnetic data is also included in the project report (Figure 6).

2.6 Archaeological Excavation

2.6.1 Archaeological excavation was undertaken using targeted test pits and small trenches in order to investigate and record any archaeological evidence contained at key locations within the town (Figure 2). This comprised the hand-excavation of six test pits measuring 1m by 1m and one larger test pit measuring 1m by 2m (TP1-7) at five separate locations in the town. Two trenches measuring 1m by 5m were also excavated to the south (TR1 & TR2).

2.6.2 This work involved the systematic examination and accurate recording of all archaeological features, horizons and artefacts identified. All work was carried out by volunteers under professional supervision and in accordance with the codes and practices outlined by the Chartered Institute for Archaeologists regarding archaeological evaluation (CIfA 2015a).

2.6.3 The aims and principal methodology of the archaeological investigations can be summarised as follows:

- to determine the presence/absence, nature, extent and state of preservation of archaeological remains;
- to produce a photographic record of all contexts using digital format, each photograph including a graduated metric scale;
- to recover artefactual material, especially that useful for dating purposes;
- to sample any environmental deposits encountered in consultation with appropriate specialists.

2.6.4 Each test pit/trench was cleaned by hand. All possible features were inspected and were excavated by hand to retrieve artefactual material and environmental samples (where identified). This involved the hand sieving of all the excavated test pit deposits, including topsoil, in order to maximise the recovery of finds.

2.6.5 Once completed all test-pits/trenches were recorded using Dig Appleby pro-forma test-pit recording sheets. Where archaeological features/deposits were identified within the trenches, the features were recorded according to the Wardell Armstrong Archaeology standard procedure as set out in the WAA Excavation Manual (WAA 2012).

2.7 Finds

2.7.1 All finds encountered were retained on site and washed by project volunteers as part of the Dig Appleby project as part of a finds workshop held at The Appleby Hub, where they were identified to type.

2.7.2 Following this the finds were delivered to the Wardell Armstrong Archaeology office in Carlisle, where they were identified, quantified and dated to period. A *terminus post quem* was then produced for each stratified context under the supervision of the WAA Finds Officer, Megan Stoakley. On completion, the finds were cleaned and packaged according to standard guidelines (CIfA 2015b).

2.7.3 Following the completion of the project it is expected that any medieval finds will be maintained with the project archive unless it is required that these are returned to the landowners. The remainder of the material will be returned to the landowners.

2.8 Environmental Samples

2.8.1 Any animal or human bone recovered during the evaluation was identified to type and assessed for its research potential by the WAA Finds Officer, Megan Stoakley, who is a qualified osteoarchaeologist.

2.8.2 No other samples suitable for environmental analysis were obtained during the project.

2.9 Project Report

2.9.1 This project report was compiled in line with English Heritage MoRPHE guidelines (English Heritage 2006), and presents the results of the fieldwork programme and subsequent analysis of any finds or samples recovered.

2.9.2 Copies of the final report will be provided to the Cumbria Historic Environment Record along with a digital version (in PDF format) on CD, and will be available for viewing on the Appleby Archaeology Group website.

2.10 Archive

2.10.1 The project archive will be prepared to the standard specification in *Archaeological Archives A Guide to Best Practice in Creation, Compilation, Transfer and Curation* (Brown 2011).

2.10.2 Copies of all original test-pit records, context sheets, lists, photographs, plans and sections will be compiled by Appleby Archaeology Group at the end of the project, and assembled into a documented project archive. Finds and samples will be packaged appropriately.

2.10.3 The archive will be maintained by Appleby Archaeology Group until the completion of the wider project. Agreement will be sought from landowners for significant finds to be donated to Penrith Museum, along with the project archive. Otherwise these will be returned to the landowners.

2.10.4 The archive can be accessed under the unique project identifier **DA16/A** (2016 test pits) and **DA17/A** (2017 trenches).

3 BACKGROUND

3.1 Appleby-in-Westmorland - The Medieval Borough

3.1.1 The name 'Appleby' is believed to originate from the Danish 'byr' (meaning farmstead) and Old English 'aepple' (apple), meaning 'dwelling or farmstead with an apple tree'. Its earliest documented form is 'Aplebi' in 1130 (Lee 1998).

3.1.2 The earliest settlement at Appleby-in-Westmorland, appears to have been on the east side of the River Eden. It is believed that a Danish manor and village were situated in the area now called Bongate (Higham 1986, 30). Evidence for this early settlement includes a 10th century hogback tombstone, which is built into the north doorway of St Michael's Church in Bongate.

3.1.3 The political situation was complex in the Eden Valley during the 10th century, when it was ceded to the Scottish kingdom of Strathclyde, and attacked by the English under Ethelred in 1000, but was held by Scotland at the time of the Norman conquest (Summerson 1993). King William Rufus took Carlisle in 1092, and it is believed that a motte and bailey was constructed in Appleby-in-Westmorland soon after.

3.1.4 During the 11th to 13th centuries Appleby-in-Westmorland was situated in a kingdom with changing rulers. Under King William Rufus the Eden Valley was held by a number of Norman lords, starting with Ivo Taillebois, and may have been very much a 'frontier land'. However, between 1122 and 1135 Henry I shaped Westmorland into a shire, run by sheriffs. In 1135 King David of Scotland took control of Carlisle, and became the dominant authority in the county until 1157, when Appleby-in-Westmorland was restored to England.

3.1.5 Appleby Castle consists of 12th century earthworks, keep and curtain wall with a 13th century round tower, and 15th century southeast square tower. The castle is believed to have been constructed by Ranulf de Meschines (or Briquessart), who was overlord of the Eden Valley for 20 years from *c.*1100

(Holdgate 2006, 36). However, it is also thought possible that work was undertaken by Hugh de Morville who was installed at Appleby from 1136 under King David. Later works were undertaken by the Clifford family who were resident from the late 13th century until the death of Lady Anne Clifford.

3.1.6 The construction of the castle was followed by a new planned town and economic activity focused on Boroughgate. This new town is also ascribed to Ranulf de Meschines, who as overlord would have benefited from the new town through the payment of rents and tolls. The town was laid out to the north of the castle in the loop of the River Eden, with St Lawrence's Church and graveyard at the north end of the main street, which would also provide a wide market place for trading.

3.1.7 The layout necessitated the construction of a bridge across the River Eden, to provide access to the old town at Bongate, and the road to Carlisle. The new town was also a 'borough', a place where the burgages were free from land taxes, but had other rights granted by the Lord of the manor in return for the rents they paid. The town is believed to have come into existence around 1100, and in 1179 received its first charter (Rollison 1996, 46).

3.1.8 Other Norman boroughs founded around this time included Carlisle,Cockermouth, Egremont, Greystoke, Keswick, Newton Arlosh (Wigton), Penrith, Skinburness, Wavermouth, Kendal and Brough under Stainmore. The new boroughs were inextricably linked to the countryside, providing the market places for agricultural products from the surrounding area. Appleby-in-Westmorland was strategically located on an important trans- Pennine route (the present A66) and developed into an important trading centre, whilst other boroughs failed. Newton Arlosh, Kirkoswald, Greystoke and Pooley Bridge for example never developed into significant settlements (Winchester 1987, 122).

3.1.9 From the end of the 12th century and throughout the 13th century, Appleby-in-Westmorland prospered as a centre of trade, linked to the surrounding countryside through its market focused on Boroughgate. A number of major building projects were undertaken, including the construction of a friary for Carmelite monks to the north of the town, and a leper hospital dedicated to St Leonard at the site of Holm Farm to the west of the town. However, by the end of the 14th century a combination of plague, climate change and Anglo-Scottish disputes had left large parts of the town in ruins, and it took until the 16th century to recover (Rollison 1996, 103-104).

3.1.10 Under the reign of Edward I in the early 14th century border defences were improved,; however, after his death in 1307 the area was left to defend itself. In 1314 Robert Bruce's invasion of England resulted in the ravaging of Appleby-in-Westmorland, as well as Brough and Kirkoswald. Carlisle was besieged on numerous occasions during the 14th century and the surrounding countryside laid waste, and on 26th December 1388 Appleby-in-Westmorland was reputedly almost completely destroyed, never again regaining its former prosperity.

3.1.11 In 1603 the Union of the Crowns brought a lasting peace and stability to the border region. Appleby-in-Westmorland benefited from this political situation, and again began to prosper. During the middle of the 17th century the town came under the control of Lady Anne Clifford, who was an important figure in the history of the area, and did much to restore the castle from its ruinous state. She also worked to improve the town, and constructed the St Anne's Hospital on the east side of Boroughgate, opening in 1653 for the maintenance of 13 poor widows.

3.1.12 The High Cross, which stands at the south end of Boroughgate, was erected in the 17th century, inscribed 'Retain your loyalty Preserve your right'. This cross, and the 18th century Low Cross at the north end of

Boroughgate, are replacements of earlier crosses, which marked the limits of the medieval market.

3.1.13 Throughout the 18th and 19th centuries the market town of Appleby-in-Westmorland grew in prosperity. Boroughgate remained an important street in the town and saw the construction of a number of substantial 18th century houses. As the demand for land increased a number of the original burgage plots became in-filled, often with buildings constructed around a courtyard behind the street frontage.

3.1.14 The High Cross was the site of a cheese market and Whitsuntide hiring fair, so remained an important focus for economic activity. Appleby remained the county town of Westmorland until it was dissolved in 1974. It has remained a traditional market town, with very few modern developments having taken place within the medieval core.

3.2 Documentary Evidence

3.2.1 The following information regarding the town of Appleby-in-Westmorland was obtained from documents held in the Cumbria Record Office (CRO) in Kendal, which were transcribed by volunteers as part of the Dig Appleby project. References to the original documents are provided in the text below. The information was summarised from original transcriptions and the text was provided by volunteers Barbara Blenkinship and Carol Dougherty, focusing primarily on evidence for the town's buildings, economy and trades.

3.2.2 ***Chamberlains Accounts 1585-1625:*** During the period covered by these accounts several large building projects took place in Appleby-in-Westmorland for which detailed records of the cost of procuring materials, as well as the associated labour costs have survived. The accounts provide a window on everyday life in Appleby-in-Westmorland during this period, as each skilled workman is usually named and his remuneration recorded.

3.2.3 Appleby-in-Westmorland appears to have been almost completely self-sufficient as regards the ability to carry out a wide variety of crafts, especially those involved in the building and maintenance of town property as well as keeping the all-important bridge over the River Eden in good repair. The layout of the town has remained almost unchanged to this day, and many of the surnames mentioned in the accounts still flourish in the town.

3.2.4 The most important civic building, the Moot Hall, was built about 1596 (Holdgate 2006, 144), but unfortunately the accounts for that year have not survived. However, the accounts for 1617 state that the windows were repaired by Thomas Warton, "glasner", and that the building was important enough to be slated, unlike most of the other buildings of that period in Appleby-in-Westmorland, which were thatched (CRO Ref. WSMBA/2/3/AB).

3.2.5 It may seem odd that the Moot Hall roof needed attention only 20 years after it was erected but such roofs were subject to rain and snow blowing under the slates in the winter. The answer to this problem was to pack any voids under the slates and between the laths with moss and then to apply a coat of lime mortar. This process is called underdrawing and was very effective as sphagnum moss can absorb up to 25 times as much water as its dry weight without releasing it, however when the moss eventually degrades the mortar would then start to drop down into the interior of the building.

3.2.6 The accounts make it clear that this process was used on the roof of the Moot Halli, the slater was named as John Smith who provided one cartful of slate for twenty pence and 6½ bushels of lime for four shillings and six pence (CRO Ref. WSMBA/2/3/AB). In addition, John was paid eight shillings for "mossing and limeing the same" while Christopher Sowerbie received eighteen shillings for "getting the mosse". This detailed description of an early 17th century roof repair in the Eden Valley is extremely rare and emphasises the importance of these accounts.

3.2.7 More detailed accounts survive of the building in 1614/15 of a Common Bakehouse in High Wiend (CRO Ref. WSMBA/2/3/AF). The building had stone walls which were raised by an anonymous team of wallers from Drybeck. It is unusual for workmen not to have been named in the accounts but these men were consistently referred to simply as "the wallers", however, it is assumed that that there were three of them as they were provided with "three paire of gloves". The timber for the roof was supplied by Thomas Ubanke and cut from Dufton Wood. After the roof had been framed and raised it was lined with "turfes" brought to the site by Hugh Murton then laid upside down on the roof timbers. Threescore threave of straw "lead from the South Field" by James Warriner was used by John Fairer, the "theeker" (thatcher) and Edward Benson was paid sixpence for "getting of spelks (hazel branches used to pin down the straw) and drawing of thatch" for one day.

3.2.8 The floor or "sole" of the oven was constructed using a redundant millstone bought for two shillings and sixpence from Willyam Robinson of Brampton Mill (CRO Ref. WSMBA/2/3/AK). It took seven men to get the millstone to Appleby-in-Westmorland; four men to help load it into the cart, John Lawe to lead the horse and two men to walk behind "for the kings carriages" (CRO Ref. WSMBA/2/3/AN), presumably a requirement for carts travelling very slowly on the Kings Highway.

3.2.9 Only two tasks in the whole of these accounts have been noted which required a skill not available in Appleby-in-Westmorland and they were both related to the holding of the market, the most lucrative source of income for the town.

3.2.10 Selling on Market Day could not begin until the Market Bell was rung at a predetermined time so it was essential to have the clock repaired as soon as possible. This necessitated Anthonie Stewardson and the chamberlains carrying it to Bolton to be re-cast by John Sanderson at a cost of three shillings to include "fower pounds of mettall to be put to it" (CRO ref. WSMBA/2/3/AN). In order to ensure that the Market Bell was rung at the correct time a reliable clock was needed and although it received frequent attention for minor faults throughout this period it eventually resisted all the usual efforts to repair it and a clockmaker named Simonde Washington had to be sent for "upon he came to see the clock" which cost two shillings.

3.2.11 As noted above, occupations mentioned in the documents seem to be numerous and varied, and it looks as though the town locals with a range of expertise in various trades and crafts. A "pavior" was paid by the town to make sure paving stones were kept in good order and to lay new ones. In 1615 Robert Dodynge received 3 shillings for "payvinge the prison and lyeing of the steeppes". Hedge–lookers and Swine-lookers were often one and the same. It was someone appointed to supervise and ensure that fences and enclosures were maintained fit for purpose and that pigs were not allowed to stray.

3.2.12 Work done by William Robinson the carpenter working on the "common backhouse" shows that he received 7 shillings "for supplying bandes and crookes and a locke to the backhouse Doore, fower plankes to be the two tables in the backhouse and wood for two frames to set them on" (CRO ref. WSMBA/2/3/14).

3.2.13 There is a reference to "task money" in document Ref. WSMBA/2/3/17, possibly payment for an extra "shift" or an extra payment for working on a specific task? Robert Bayliffe and Thomas Harrison "constables for Bongate" received five shillings for their "task monie for the bridge" as did Thomas Wilson and James Darbie "constables for Scattergait and Burelles". Shortly after the period covered by these Chamberlains Accounts constables were empowered to levy a local rate to meet their expenses.

3.2.14 Another curious reference is to a "spice seller" (CRO Ref. WSMBA/2/3/4). Beekeepers were often beeswax sellers and both trades belonged to confection and spice-selling – was the "spice seller" purveying beeswax, honey or actual spices? Several words in the various documents are immediately recognisable – "wauller", "lattes", "morter", "sparres", "nayles", "chimlay" and some posed a bit more of a challenge such as "showling" (shovelling), "watlinges" (wattle) and "astriee" (a hearth) which occurs only once in all the documents examined. Thomas Ubancke was paid nineteen pence "for wood to be part of an astriee in the backhouse" (CRO Ref. WSMBA/2/3/13).

3.2.15 Local labourers and skilled craftsmen worked on both the bakehouse and prison, with some turning their hand to a variety of jobs (CRO Ref. WSMBA/2/3/14 and WSMBA/2/3/15). Edward Bonson "redded the grounnd" (prepared the ground) for the bakehouse and was paid for "goeinge to Dribeck for the wauller", for "serving the wauller of the prison", for "serving of the pavior for a barrell to use in the prison" and for "two Dayes worke at the prison". Thomas Lowson was paid for "getting and leading morter to the backhouse to the maysons for walling the same", for "leading of coble stones morter and sand to the ovens" and for "leading of lime to the prison".

3.2.16 In addition to providing the wood for the astriee (see above) Thomas Ubancke also "lead stones there" and had a hand in the construction of the prison being paid for "planckes to the prison Doore". Some individuals appear less often or only once – for example M Smith for "fower bushels of lime", J Bolas for "leading spares", Barnabie Unthancke for "leading two cartfull of stones from Kirkland",Stephen Pinder(?) "for lime" and William Robinson "for Iron and workemanshipp" in the prison and on the town bell.

3.2.17 Several wives and widows appear in some documents, where they are always referred to as "wife of" or "widow of" a named male. Usually the entry is that these wives and widows were providing "Drinke to the workmen" and receiving a fairly standard payment of 4d.

4 TEST PIT RESULTS

4.1 Introduction

4.1.1 The archaeological investigations were undertaken over four weekends in July 2016, September 2016 and May 2017 and involved 10 days of fieldwork in total. Six separate locations were investigated across the town, including in some of the largest available gardens and open spaces on Boroughgate.

4.1.2 This work comprised two geophysical surveys in the garden of St Anne's Hospital, Boroughgate and at Castle Bank, Parkin Hill, and nine individual excavations (Figure 2). The locations investigated as part of the first phase of the Dig Appleby Project were:

- TP1-3: St Anne's Hospital, Boroughgate
- TP4: 53 Boroughgate (the garden behind 55 Boroughate)
- TP5: 52 Boroughgate (the garden of Ivy House)
- TP6: 6 Doomgate (the garden of Bardon House)
- TP7: 3 Bongate (garden to the rear)
- TR1 & TR2: Castle Bank (field at Parkin Hill)

4.1.3 The excavations comprised six 1m by 1m test pits (TP1, TP2 and TP 4-7), one test pit measuring 1m by 2m, which was excavated on land in the garden of St Anne's Hospital (TP3), plus two trenches measuring 1m by 5m at Castle Bank to the south of the town (TR1 & TR2).

4.1.4 ***St Anne's Hospital, Boroughgate:*** located on the east side of Boroughgate, St Anne's Hospital was constructed by Lady Anne Clifford, opening in 1653 for the maintenance of 13 poor widows, looked after by a 'mother'. The hospital comprises almshouses with a private chapel, arranged around a central courtyard and is Grade II* Listed (List Entry 1145571).

4.1.5 A feoffment (transfer of property) dated 31st December 1650 describes the property as '*all the burgage houses and close one acre between the houses and burgages of Leonard Smith on the south side, and the houses and burgages of Mr George Hilton* *of Murton on the north side, abutting the Eden on the east side and the street called Boroughgate on the west side*'. This land originally encompassed four medieval burgages and houses, the remains of which would have presumably been cleared for the construction of the hospital.

4.1.6 On 2nd August 1651 Lady Anne obtained a charter for the founding of the hospital, which was constructed soon after. The land to the east was utilised as garden plots, and is depicted as such on the Hill's 1754 Plan of Appleby-in-Westmorland (Figure 3).

4.1.7 The First edition Ordnance Survey map of 1861 depicts this area subdivided into fourteen regular allotments, subdivided by paths. A small outbuilding is depicted on this map at the northeast corner. The garden was cultivated until relatively recently, but is now grassed over and used as a communal garden.

4.1.8 ***53 Boroughgate:*** the garden of 53 Boroughgate is located on the east side of Boroughgate, being the most southern garden on the street. It lies behind 55 Boroughgate, the gardens being discontinuous with the houses to the west.

4.1.9 The land investigated was one of four burgages called 'High Cross' in 1717. The garden is depicted as an unoccupied plot of land on the 1754 Plan of Appleby-in-Westmorland (Figure 3), but new houses are shown on 1843 Tithe map of St Lawrence (replacing those on 1754 Plan).

4.1.10 The current buildings were constructed in the late 18th or early 19th century and are Grade II Listed (List Entry 1145572). Nos 49-55 Boroughgate were previously known as Castle Green, and owned by Appleby Castle until being sold privately.

4.1.11 ***52 Boroughgate (Ivy House):*** the garden of 52 Boroughgate lies on the west side of Boroughgate, behind an 18th century property, known as Ivy House, also a Grade II Listed Building (List Entry 1145570).

4.1.12 The garden is shown undeveloped on the 1754 plan (Figure 3) and the 1843 Tithe map, but by the 19th century this garden had been subdivided between Ivy House (in the east) and The Ivys (in the west).

4.1.13 ***6 Doomgate (Bardon House):*** the garden of 6 Doomage lies on the west side of Doomgate, previously the back lane to Boroughgate. The property was recorded as a barn and stable on 'Dungait' in 1733. The land is shown as a garden on the 1754 Plan of Appleby-in-Westmorland (Figure 3).

4.1.14 Bardon House is a Grade II Listed building (List entry 1145548) constructed early 19th century along with Nos 7, 8 and 9 Doomgate. It was occupied by Thomas Yare, iron merchant 1806-1890, and part-occupied by Jonathan Barnes, printer 1863 (pers. comm. David Lowis).

4.1.15 ***3 Bongate:*** Bongate lies to the east of the River Eden and is believed to be the location of an earlier settlement in existence before the Norman planned town.

4.1.16 Number 3 Bongate lies at the northern edge of this settlement on the east side of the road. The garden is located to the rear of a former farmhouse, adjacent to St Michael's Lane (Figure 2).

4.1.17 The existing property is Grade II Listed (List Entry 1145596) built late 18th century. The site is not included on the 1754 plan. The First Edition Ordnance Survey map of 1859 shows the garden on the northern edge of Bongate.

4.1.18 ***Castle Bank:*** The field investigated at Castle bank is on the southern edge of Appleby-in-Westmorland on the east side of the road to Burrells adjacent to Parkin Hill (Figure 2). The field is currently owned by Castle Bank House, and tenanted by Castle Bank Farm, and is under pasture.

4.1.19 The 1754 Plan of Appleby-in-Westmorland depicts one or two buildings in the northwest corner of this field, adjacent to the road. These were in existence on the 1843 Tithe map but no longer in existence by the time of the 1859 Ordnance Survey map. An ice house lies within this field to the east.

4.1.20 The field has remained undeveloped agricultural land throughout the post-medieval and modern periods, apart from the construction of a dwelling immediately to the north in the late 19th century.

4.2 Results

4.2.1 A preliminary geophysical survey was undertaken of the garden of St Anne's Hospital on 16th July 2016, the land being open lawn and therefore suitable for survey (Plate 1). An earth resistance survey was undertaken over an area measuring 813m^2 covering the majority of the garden, excluding some orchard trees, flower beds, paths and a small shed on the north side of the garden (Figure 4).

Plate 1: *Earth resistance survey of the garden of St Anne's Hospital*

4.2.2 Some iron posts for a washing line were present on the northeast side of the survey area, which produced high resistance anomalies, due to the concrete bases. A very low resistance linear anomaly was also detected on the south side of the survey area, which corresponded to the location of a former garden path.

4.2.3 Overall the survey showed variations in earth resistance across the area surveyed, which corresponded to the former garden allotments, with some regular rectilinear patterning visible across the site.

4.2.4 Significantly some high resistance anomalies were detected on the northeast side of the survey area, which suggested the presence of rubble deposits or made ground.

4.2.5 Three test pits (TP 1-3) were excavated in this area over two weekends, on 29th-30th July 2016 (TP 1 & TP2) and 16th-18th September 2016 (TP3) to test the results of the geophysical survey, and to investigate any evidence for medieval occupation.

4.3 Test Pit 1 (TP1)

4.3.1 Test Pit 1 was located to sample the northwest side of the garden of St Anne's Hospital, immediately to the east of the hospital chapel, and measured 1m by 1m with a total excavated depth of 0.76m.

4.3.2 A 0.3m-deep layer of garden topsoil **(100)** was removed from this test pit, containing fragments of coal, glass, clay pipe, post-medieval pottery and some medieval pottery fragments. This overlay an earlier garden soil **(101)** measuring 0.3m deep, containing a similar assemblage of post-medieval and medieval finds and some metal slag.

4.3.3 A distinct layer of brown sandy clay **(102)** was identified at the base of the garden soil **(101)**, measuring approximately 0.5m wide and 0.1m deep, which contained several sherds of post-medieval and medieval pottery and animal bone. This was interpreted as filling a shallow hollow in the underlying ground surface.

4.3.4 The underlying ground surface comprised a relatively compact crude cobbled surface **(103)**, with rounded cobbles measuring up to 0.1m in diameter, from which a single sherd of medieval pottery was recovered. This was interpreted as a possible former yard or ground surface.

4.3.5 These were set within orange sandy clay **(104)** containing some fragments of coal, bone and degraded organic material. A 0.2m sondage was excavated in the base of the test pit, but no change in this material could be identified. It is considered that the sandy clay **(104)** could be natural, with material trampled into the upper surface, or a layer of medieval made ground, but this was uncertain due to the small size of the test pit (Plate 2).

4.3.6 The results of Test Pit 1 indicated that a substantial depth of garden soil (up to 0.6m in depth) had developed in this area, covering a potential earlier medieval surface. This accorded with the site topography, which was substantially higher at the north side of the garden compared to the adjacent garden to the north.

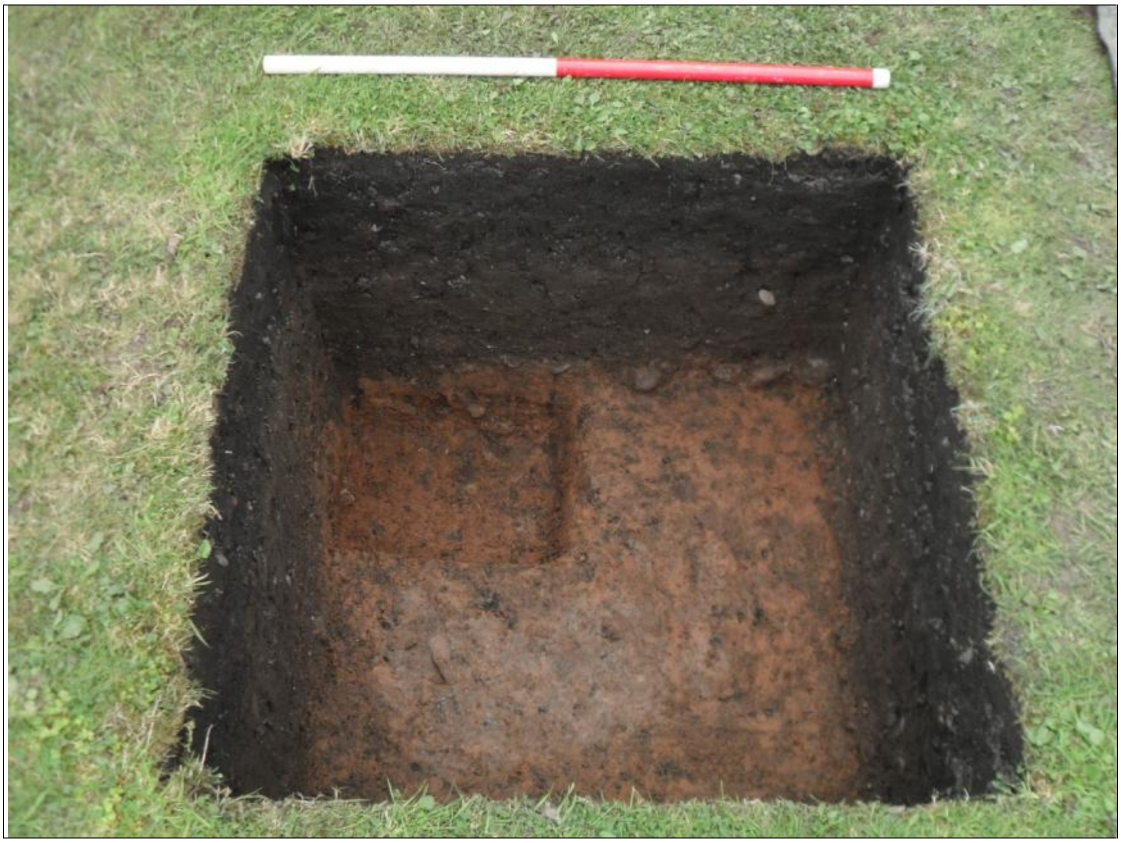

Plate 2: *TP1, St Anne's Hospital, looking west*

4.4 Test Pit 2 (TP2)

4.4.1 Test Pit 2 was located to sample a high-resistance anomaly at the northeast side of the garden of St Annes's Hospital, which the geophysical survey indicated may contain rubble or made-ground. The test pit measured 1m by 1m with a total excavated depth of 0.7m.

4.4.2 A 0.2m-deep layer of garden topsoil **(200)** was removed from this test pit, containing fragments of coal, glass, clay pipe, post-medieval pottery and bone. This overlay a substantial deposit of sandstone rubble and river cobbles **(201)**. Some larger sandstone pieces measuring up to 0.4m long and 0.25m wide were present, along with quantities of mortar (Plate 3). The base of this deposit could not be reached given the small size of the test pit, but it comprised a substantial rubble deposit over 0.5m deep.

4.4.3 The rubble deposit **(201)** was interpreted as material from a former post-medieval building or demolished structure, possibly representing the remains of an outbuilding depicted in this location on the 1861 Ordnance Survey map.

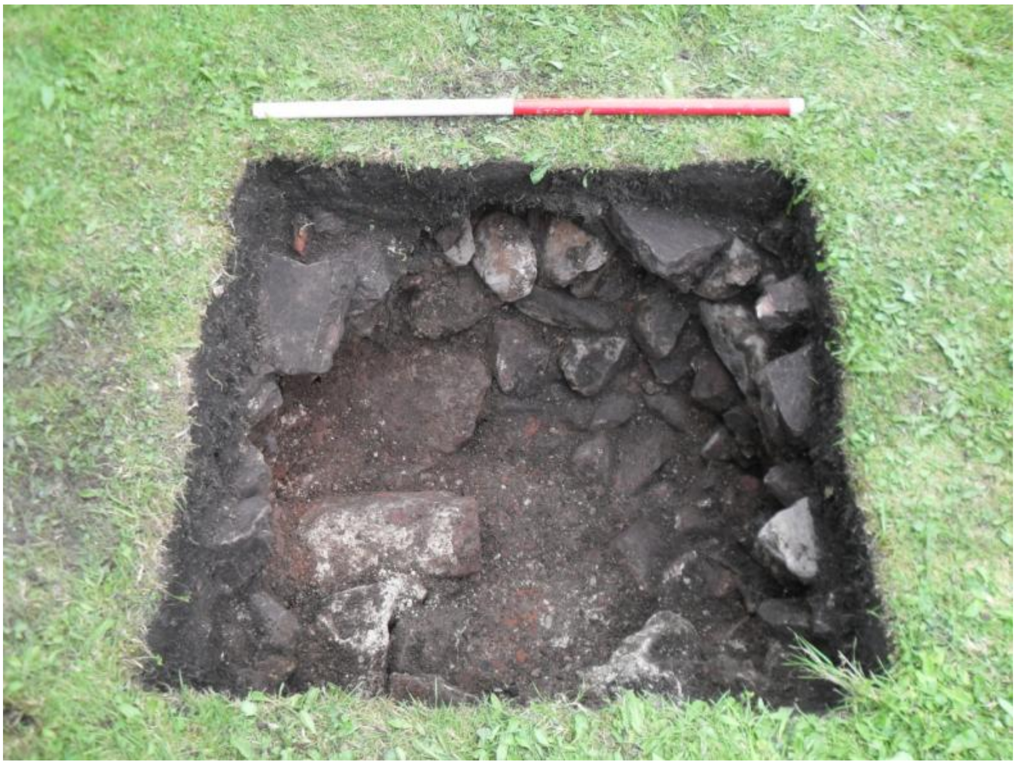

Plate 3: *Rubble deposit (201) in TP2, looking south*

4.5 Test Pit 3 (TP3)

4.5.1 Test Pit 3 was located to sample the southwest side of the garden of St Annes's Hospital, which would have been located in a separate burgage, to the south of Test Pit 1 and Test Pit 2 in the medieval period (Plate 4).

4.5.2 This test pit measured 1m by 2m being excavated to a depth 0.5m. The test pit was extended to 2m-long due to the limitations experienced with Test Pit 1 and Test Pit 2, and in order to increase the possibility of identifying archaeological features.

4.5.3 A 0.2m-deep layer of garden topsoil **(300)** was removed from this test pit, containing fragments of glass, clay pipe, post-medieval pottery and some medieval pottery. This overlay an earlier garden soil **(301)** measuring 0.2m deep, containing post-medieval and medieval pottery and some corroded nail fragments. A flint object was also recovered from this soil layer (see Section 5).

4.5.4 The cut for a post hole **[307]** was identified in section at the west end of Test Pit 3**,** filled with a brown loam soil **(306)**. This measured 0.25m wide and 0.15m deep with a rounded profile, and cut garden soil **(301)**, indicating that it was probably relatively modern.

4.5.5 A 0.1m-deep layer of sandy clay with cobbles **(303)** was revealed beneath garden soil **(301)** in Test Pit 3, containing sherds of medieval pottery. This appeared to represent a similar crude cobbled surface to that identified in the bottom of Test Pit 1. This overlay a similar compact clay with cobbles **(304)**, the bottom of which was not reached, and may have been either a disturbed natural or made ground. No finds were recovered from this layer.

4.5.6 The cut **[305]** for a possible post-hole was identified in the southeast corner of Test Pit 3. This measured 0.2m in diameter, being 0.15m deep, with a rounded profile and flat base. This feature cut sandy clay layers **(303)** and **(304)** and was filled with a number of rounded stones **(302),** measuring up to 0.15m in diameter, interpreted as post packing stones. These stones were two-layers deep defining an internal space with a diameter of *c*.0.15m, presumably for a former timber post (Plate 5 & Plate 6). Two sherds of medieval pottery were recovered from this fill, indicating a possible medieval or post-medieval date.

4.5.7 The single post-hole is difficult to interpret in isolation, but could indicate the presence of a medieval or post-medieval structure. Overall the results of Test Pit 3 indicated that a less-substantial depth of garden soil (up to 0.4m in depth) had developed in this area, compared to Test Pit 1.

4.5.8 A similar crude cobbled surface was identified in both test pits **(103)** and **(303)**, which may represent a former yard surface or trampled ground surface of possible medieval date.

Plate 4: *Working shot of TP3 in the garden of St Anne's Hospital, looking east*

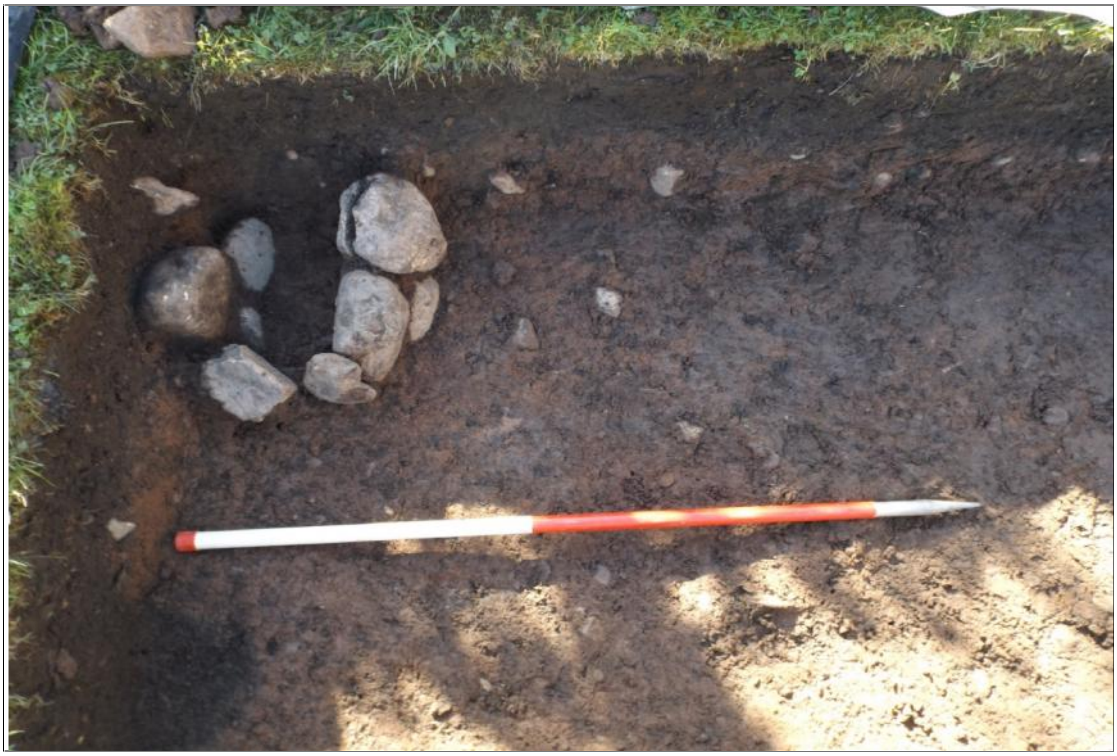

Plate 5: *Possible post-packing stones* ***(302)*** *in TP3, looking south*

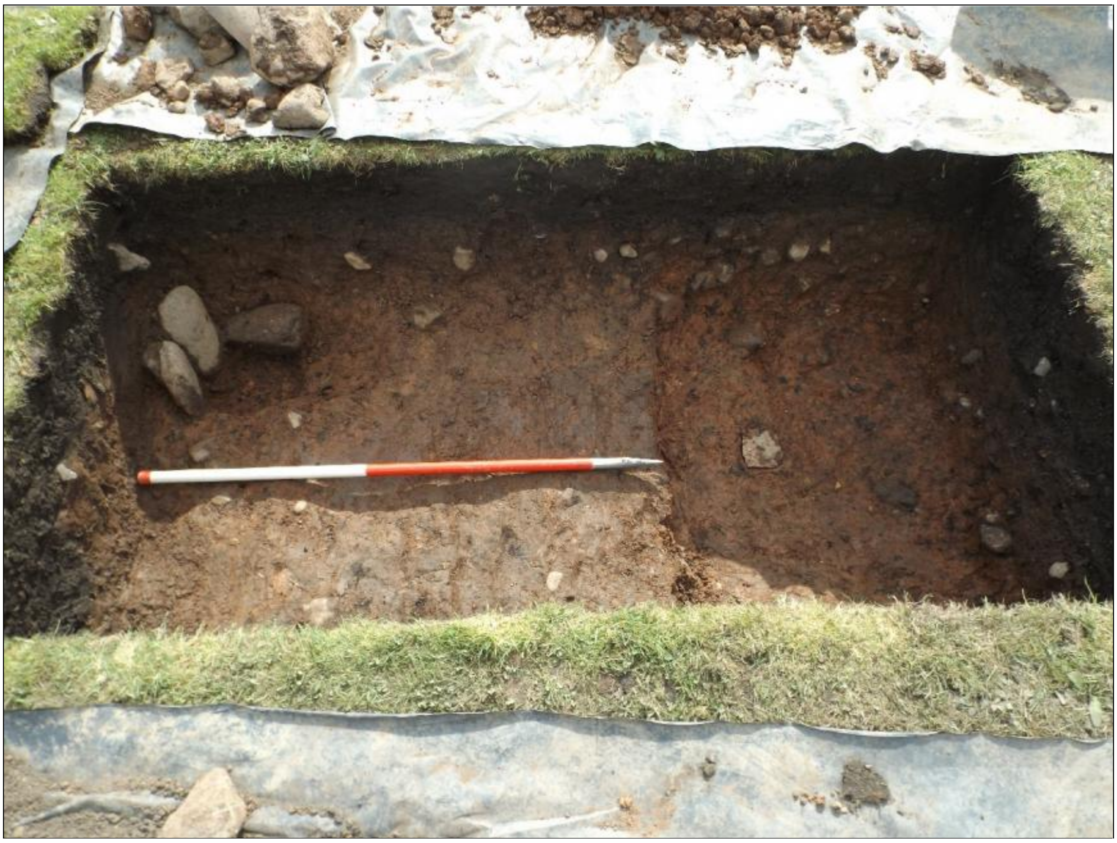

Plate 6*: TP3, fully excavated, looking south*

4.6 Test Pit 4 (TP4)

4.6.1 Test Pit 4 was located in the garden to the rear of 55 Boroughgate (belonging to 53 Boroughgate) to sample the most southern of the available Boroughgate gardens on the east side of the street (Figure 2, Plate 6). The test pit measured 1m by 1m with a total excavated depth of 0.7m.

4.6.2 A 0.25m-deep layer of garden topsoil **(400)** was removed from this test pit, containing fragments of coal, glass, clay pipe, iron nails, post-medieval pottery and some medieval pottery fragments. This overlay a mixed orange clay **(401)** measuring 0.2m deep, containing a rubble deposit of sandstone, cobbles and mortar, with some corroded nails, ceramics, tile and present.

4.6.3 A compact sandy orange clay **(402)** was identified beneath this layer, containing occasional rounded cobbles. A sondage was excavated into this material, but the bottom was not reached, and it was interpreted as natural, containing no further finds (Plate 7).

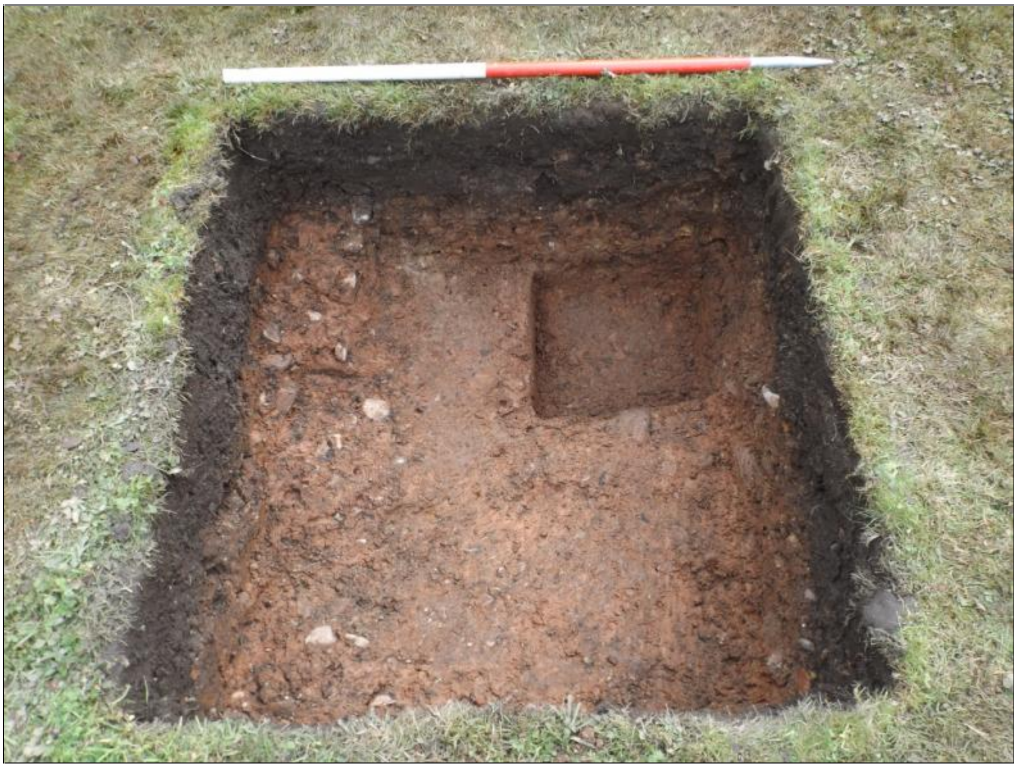

Plate 7: *TP4, 53 Boroughgate, looking west*

4.6.4 The demolition layer identified in Test Pit 4, was interpreted as probably being associated with a former post-medieval building, or garden structure. Although some medieval pottery was recovered from this test pit, it was recovered from the topsoil and is therefore residual.

4.7 Test Pit 5 (TP5)

4.7.1 Test Pit 5 was located on the west side of Boroughgate (Figure 2) to sample the garden to the rear of 52 Boroughgate (Ivy House). The test pit measured 1m by 1m and was excavate to a depth of 0.7m.

4.7.2 Modern topsoil **(500)** measuring 0.2m deep, containing mostly post-medieval ceramics, was removed from the test pit to reveal an earlier 0.4-deep garden soil **(501),** containing medieval and post-medieval ceramics, iron objects, slag and mortar. A line of three rounded cobbles was noted in the northern section, at a depth of 0.3m, which may have represented the edging stones of a garden feature or path (Plate 8).

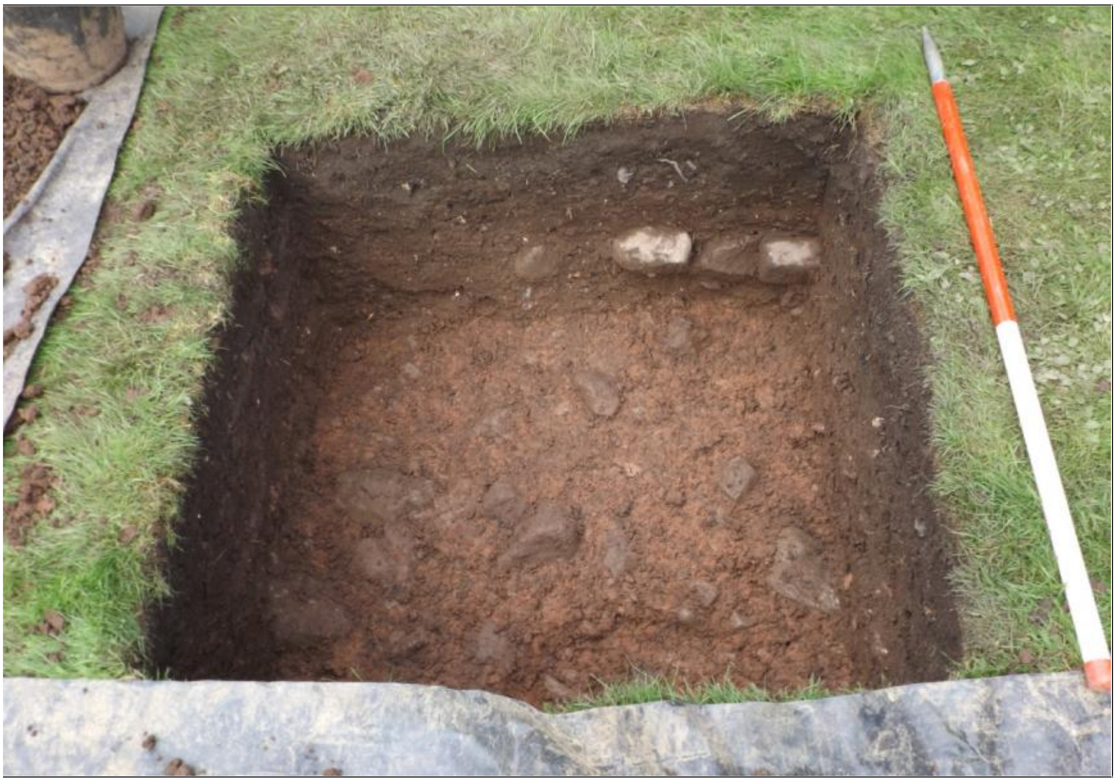

Plate 8: *TP5, 52 Boroughgate, looking north*

4.7.3 Beneath this garden soil a crude cobbled surface **(502)** was identified comprising rounded and angular cobbles measuring up to 0.1m in diameter. These were set within orange sandy clay **(502)** containing no finds. This was interpreted as a possible former yard or ground surface, similar to that identified in TP1 and TP2 on the opposite side of Boroughgate.

4.8 Test Pit 6 (TP6)

4.8.1 Test Pit 6 was located in the vegetable garden to the rear of 6 Doomgate (Bardon House) to sample the area to the west of the Doomgate properties. This test pit also measured 1m by 1m and was excavated to a depth of 0.85m.

4.8.2 A dark rich 0.5m-deep garden soil **(600)** was removed from this test pit, containing modern, post-medieval and medieval pottery, glass, clay pipe and bone (including an isolated human tooth). Beneath this an earlier grey-brown sandy clay soil **(601)** was identified, measuring 0.35m-deep, and containing post-medieval pottery, clay pipe and glass.

4.8.3 At the base of this soil a cobbled surface was identified **(602)** comprising some large rounded cobbles measuring from 0.1m to 0.3m in diameter, and filling the bottom of the test pit (Plate 9). Some sherds of medieval pottery and slag were retrieved from the material directly above this surface, which was interpreted as being part of a former yard or track surface.

4.8.4 No further excavation could be undertaken in Test Pit 6, due to the small size and depth of the test pit. It was evident that this area had seen the importing of a considerable depth of soil to make up the gardens of the Doomgate houses, covering over the former cobbled surface, which may be medieval or post-medieval in date.

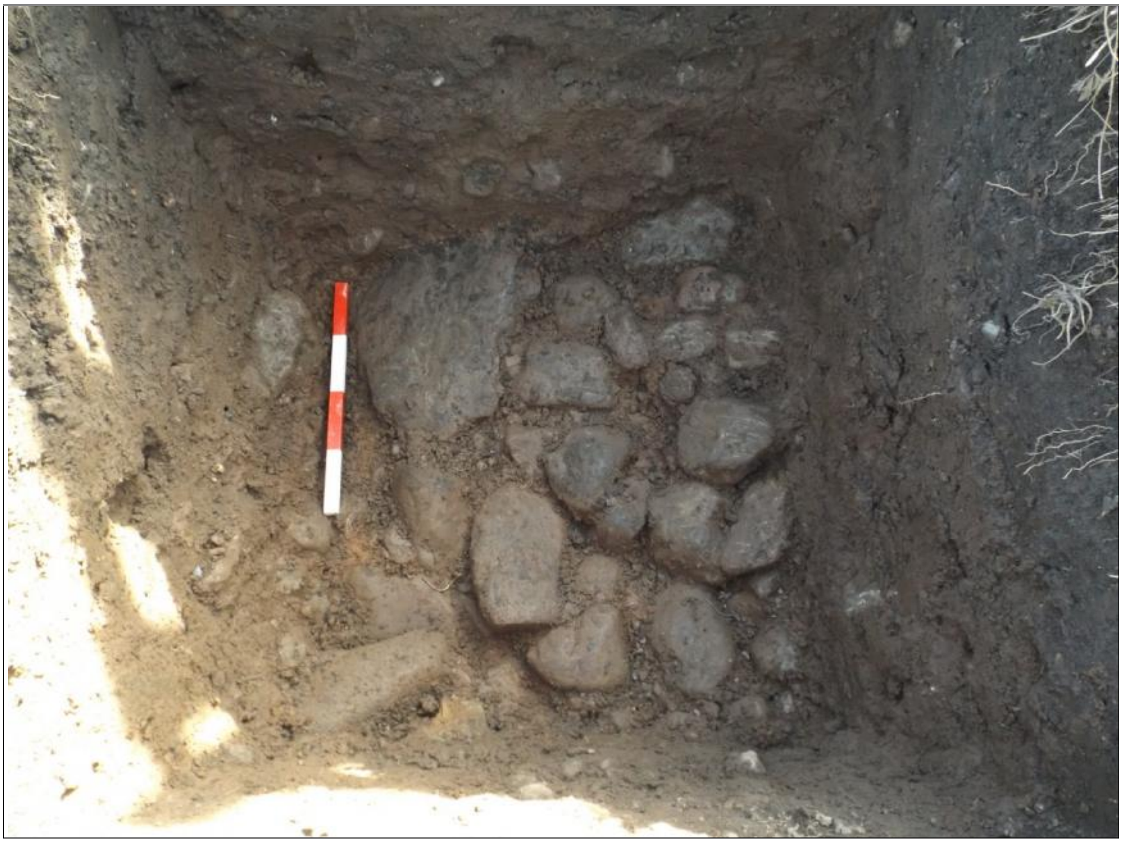

Plate 9: *Cobble surface **(602)** in TP6, looking south*

4.9 Test Pit 7 (TP7)

4.9.1 Test Pit 7 was located to sample the garden to the rear of 3 Bongate, east of Boroughgate and the River Eden (Figure 2). This test pit also measured 1m by 1m and was excavated to a depth of 0.65m (Plate 10).

4.9.2 A 0.35m-deep garden soil **(700)** was removed from this test pit, containing modern, post-medieval and medieval pottery, glass, bone and slag. Beneath this an earlier grey-brown sandy clay soil **(701)** was identified, measuring 0.3m-deep, and containing post-medieval pottery, clay pipe and iron objects.

4.9.3 This overlay orange sandy clay natural **(702)**, into which a sondage was excavated. No Further finds were recovered from this test pit.

4.9.4 The property was located on the edge of the medieval and post-medieval settlement of Bongate, to the rear of a former farm. The land may have been agricultural for most of this time, perhaps explaining the paucity of finds.

Plate 10: *TP7, 3 Bongate, looking northeast*

4.10 Trench 1 and Trench 2

4.10.1 A preliminary geophysical survey was undertaken of area of Trench 1 and Trench 2 on 17th March 2017, the land being under pasture and part of a larger field belonging to Castle Bank on the east side of the road to Burrells, to the south of Appleby-in-Westmorland (Figure 2).

4.10.2 A geomagnetic survey was undertaken over an area measuring 4,128m^2 covering the west side of the field, as far as possible the area of former buildings as depicted on Hill's 1754 Plan of Appleby-in-Westmorland. However, the survey was somewhat obstructed in this area due to the presence of a water trough with concrete slabs, a telegraph post, and fences. A low stone bank was also present on the west side of the field, which is a remnant of a field boundary depicted on historic Ordnance Survey maps.

4.10.3 The geophysical survey detected strong magnetic disturbance on the southern and western sides of the survey area, due to the presence of modern fences, and structures (Figure 5). The water trough and concrete slabs also produced very strong magnetic anomalies on the northwest side of the survey area, which dominated the results of the geophysical survey in this area. As a result no evidence for possible former buildings or associated features was detected.

4.10.4 A strong liner dipolar magnetic anomaly was detected crossing the survey area, aligned northwest to southeast, which was due to the presence of a redundant water pipe, which had previously fed a water trough at the centre of the survey area, where further concrete slabs were noted (Figure 6). Further strong dipolar magnetic anomalies were detected across the survey area, which probably relate to fired/ferrous debris in the field.

4.10.5 An earthwork boundary bank was noted crossing the survey area, aligned northeast to southwest, which probably represents a former field boundary (although not illustrated on historic mapping). To the east of this, ridge and furrow earthworks were noted crossing the field with a similar alignment.

4.10.6 The earthwork remains of the former field boundary adjacent to the road were also recorded. At the north end of this bank, in the location of the buildings on the 1754 Plan, a sunken area was noted to be present measuring approximately 20m northeast to southwest, and 10m northwest to southeast, in the corner of the field (Figure 6).

4.10.7 Two trenches (TR1 and TR2) were positioned within this sunken area, to target the location of the former buildings as depicted on Hill's 1754 Plan of Appleby-in-Westmorland (Figure 7 and Plate 11).

Plate 11: *TR1 (in foreground) and TR2 under excavation, looking northeast*

4.11 Trench 1 (TR1)

4.11.1 Trench 1 measured 1m by 5m and was located to sample the west side of the buildings as depicted on Hill's 1754, aligned northwest to southeast. The trench was excavated to a maximum depth of 0.7m below ground level (blg).

4.11.2 A 0.2m-deep layer of topsoil **(100)** was removed from this trench to reveal a 0.2m-deep deposit of black clinker **(101)** filling the west end of the trench (Figure 8). This was evidently modern backfill for a service trench **[107]** which crossed the west side of the trench, aligned northwest to southeast, and was filled with sandy silt **(106)**. This area was therefore not excavated further.

4.11.3 Underlying the clinker layer **(101)**, and cut by the service trench **[107]**, was a 0.2m-deep layer of sandy silt plough soil, which filled the majority of Trench 1. On the southeast side of the trench a posthole **[104]** was identified in the northern trench section measuring 0.65m in diameter, and 0.55m deep, cutting through the plough soil layer. This was filled with a similar sandy silt deposit **(105)** and was interpreted as modern (Figure 8, section Trench 1).

4.11.4 Beneath the plough soil **(102)** over the majority of the trench, was a 0.3m-deep layer of orange sandy clay **(103)**. A ceramic land drain was seen to cut through this layer.

4.11.5 This layer covered a crude surface of rounded and angular cobbles **(109)**, measuring up to 0.3m in diameter, which filled the west end of the trench. Although very disturbed, these appeared to represent part of a former yard surface (Plate 12).

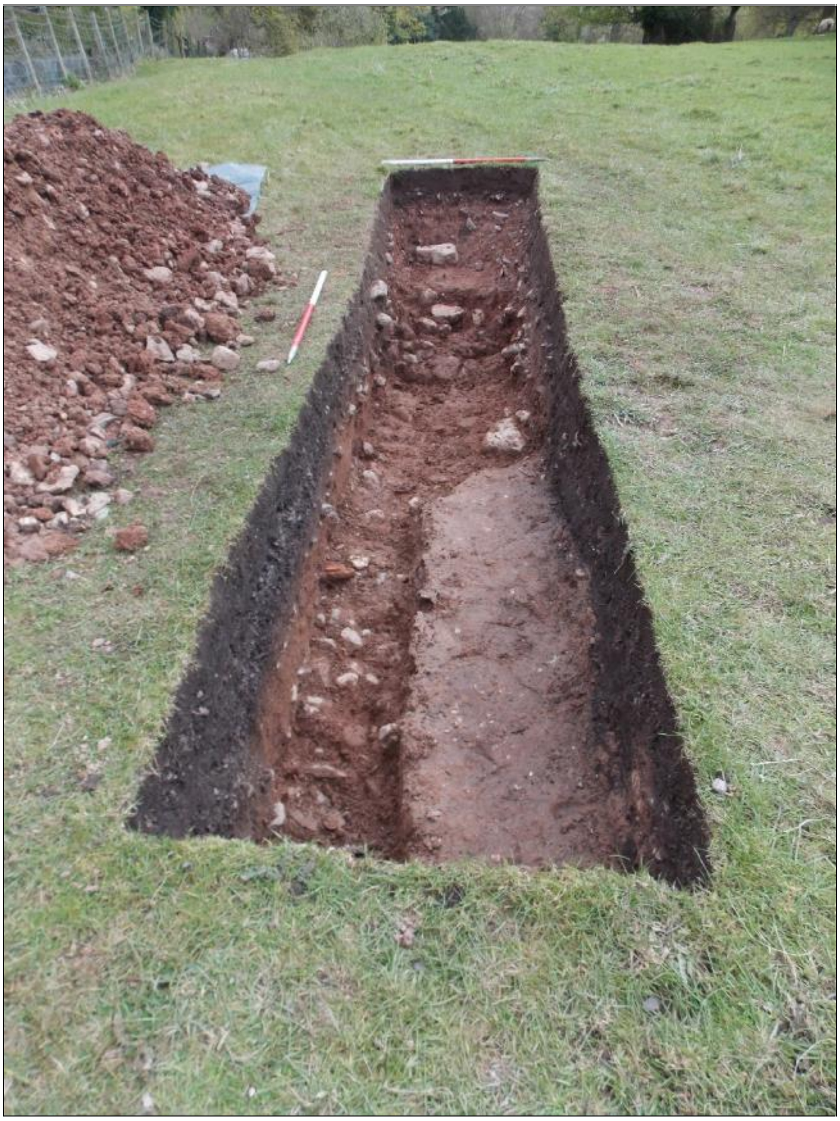

Plate 12: *TR3 showing cobbles* ***(109)*** *and bank* ***(108)****, looking southeast*

4.11.6 At the east end of the trench, where the ground rose by 0.2m, a bank of orange sandy clay **(108)** was revealed, which was similar in appearance to the sandy clay **(103)**. The bank was covered in small rounded cobbles, which were also present in less-frequent quantities within the sandy clay.

4.11.7 Beneath this bank material, and defining the eastern limit of the cobble layer **(109)** was an arrangement of large cobbles defining a possible drain or culvert **(110)**. This crossed the east end of the trench, aligned northeast to southwest, and measured approximately 0.25m wide and 0.1m deep (Plate 13).

4.11.8 No evidence for other structural remains was recovered from the trench; time limitations meaning that the cobbles were not fully excavated. Nevertheless the presence of a substantial cobbled surface and possible culvert/drain with a similar alignment to the buildings depicted on the 1754 Plan, indicates that these features may be associated to the former buildings, possibly representing an external yard defined by the low stone bank on the east side.

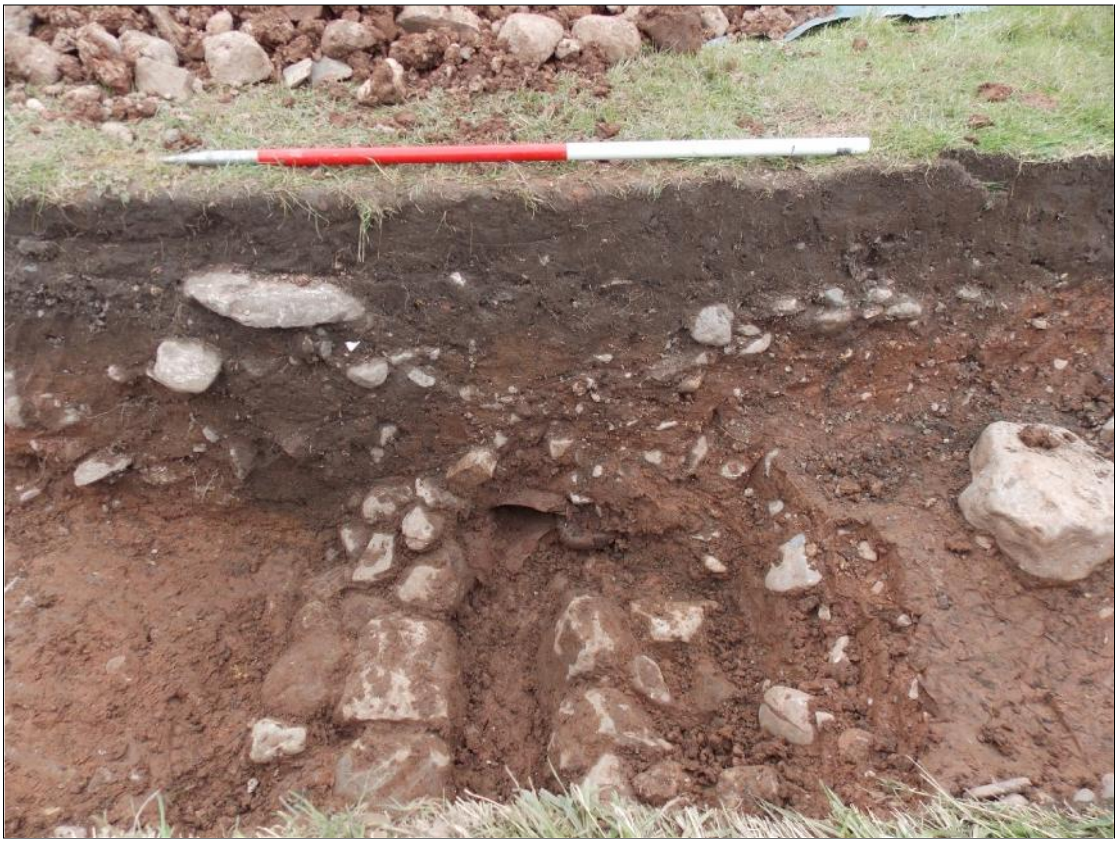

Plate 13: *Possible drain or culvert* ***(110)****, looking northeast*

4.12 Trench 2 (TR2)

4.12.1 Trench 2 also measured 1m by 5m and was located to sample the south end of the buildings as depicted on Hill's 1754, aligned northeast to southwest. The trench was excavated to a maximum depth of 0.7m below ground level (blg).

4.12.2 A 0.3m-deep layer of topsoil **(200)** was removed from this trench to reveal a 0.4m-deep deposit of sandy silt plough soil **(201)** filling the centre end of the trench for a distance of 3m (Figure 8, section Trench 2).

4.12.3 At the south end of the trench, where the ground rose by 0.2m, a bank of orange sandy clay **(203)** was revealed measuring approximately 1m long and 0.8m wide, which was covered in small rounded cobbles **(202)**. This was believed to be the northern limit of a former field boundary seen to cross the field to the southwest. A modern post-hole or tree root was seen to cut the north side of the bank (Figure 8, plan Trench 2). A sondage was also excavated through a portion of the bank, which revealed no further information.

4.12.4 In the north end of the trench a 0.2m-deep layer of sandstone rubble **(204)** was revealed beneath the plough soil layer **(201)**. This contained some large sandstone pieces including some shaped pieces, and large quantities of mortar, evidently representing demolition rubble from a former building.

4.12.5 This material overlay a cobbled surface **(205)**, comprising closely-lain rounded river cobbles, measuring between 0.1m and 0.3m in diameter. This surface measured 1.2m across, filling the full width of the trench (1m) but was bisected by a ceramic land drain (Figure 8, plan Trench 2).

4.12.6 The cobbled surface was defined to the south by the bank material **(203)** and to the north by some large sandstone pieces **(206)** forming a possible wall foundation. The largest of these measured 0.3m wide and more than 0.45m long, running into the trench section. A flag stone **(207)** measuring 0.29m wide, 0.62m long and 0.1m deep was also identified, which may have represented an entrance (Plate 15).

4.12.7 Filling the north end of the trench for a distance of 1.75m, and underlying the flagstone, was a 0.05m-deep layer of fine orange-yellow sand **(208)** which appeared to represent the bedding layer for a flag floor (since removed). This material was half-sectioned to reveal a layer of orange-pink sandy clay **(209)** which is believed to be natural.

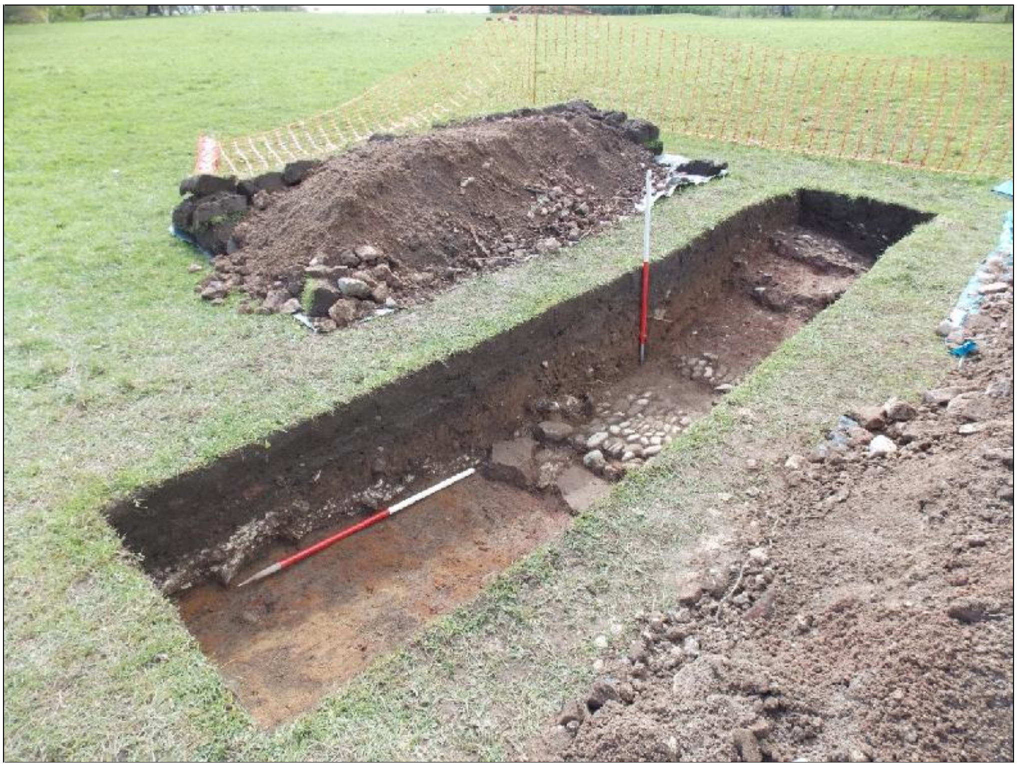

Plate 14: *Section of TR2 showing excavated features, looking southwest*

4.12.8 The archaeological features revealed in Trench 2 represent evidence for part of a building with internal room, evidently with a stone flagged floor, possible entrance doorway, and outer sandstone wall, with an external cobbled path. This was defined to the south by an earthwork bank, similar to that identified at the west end of Trench 1. The archaeological remains were overlain by a substantial demolition layer, including sandstone boiling rubble with copious mortar and some slate present.

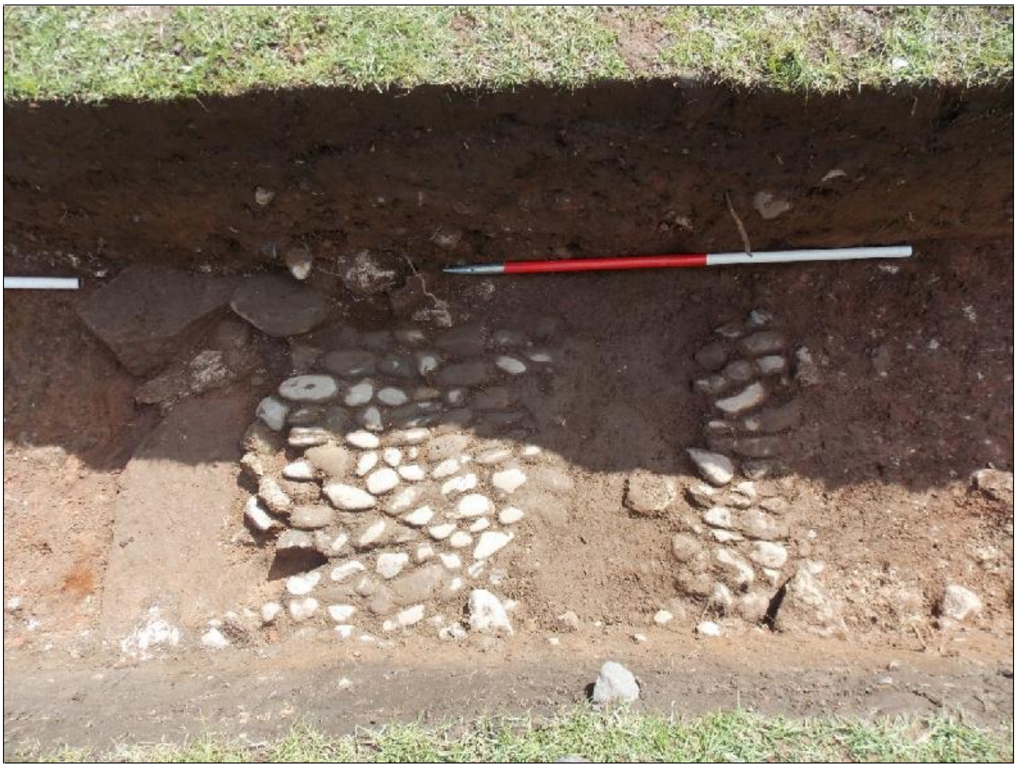

Plate 15: *Cobbled surface* ***(205)*** *and flagstone* ***(207)****, looking southwest*

4.13 **Discussion**

4.13.1 The results of the archaeological investigation at Castle Bank have confirmed the presence of the building(s) as depicted on Hill's 1754 Plan of Appleby-in-Westmorland, and provided evidence of their construction. The mortared sandstone walls of the building have been partially revealed, along with evidence for a flagged floor and external cobbled path in Trench 2, and possible external yard with drain in Trench 1.

4.14.2 It is possible, based on the limited evidence revealed by the trenches that the south end of this building was for human habitation, with animals kept to the north. This building appears to have been demolished in the mid-19th century, based on the finds recovered and the evidence of historic mapping. However, the date of construction of the building was not confirmed from the evidence recovered from the trenches.

5 FINDS

5.1 Finds from Test Pits TR1-TR7

5.1.1 Following the excavation of the test pits during the first stage of Dig Appleby community project, a finds processing session was held in Appleby with project volunteers. Finds were washed and placed in labelled trays, before being taken to the Wardell Armstrong Archaeology office at Carlisle for analysis.

5.1.2 All finds were dealt with according to the recommendations made by Watkinson & Neal (1998) and to the Chartered Institute for Archaeologists Standard & Guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2015b). All artefacts have been assessed according to material type and conforming to the deposition guidelines recommended by Brown (2011). The ceramic assemblage was assessed according to guidelines provided by the Medieval Pottery Research Group and Historic England (2016).

5.1.3 In total, 813 artefacts were recovered from the test pits, weighing 4053g.

Table 1: Quantification of Bulk Finds by Context

Test Pit	Context	Material	Quantity	Wgt(g)	Date	Comments
1	100	Ceramic	3	12	Medieval	Sandy fabrics, Overfired reduced rim sherd x 1, reduced greenware
1	100	Ceramic	30	50	Post Med	Includes refined whiteware, red earthenware, transfer printed
1	100	Clay Pipe	13	22	Post Med	Stem frags x 7, bowl frags x 6
1	100	Glass	9	16	Post Med	Clear window glass x 4, green bottle x 1, clear bottle x 4
1	100	Iron	3	12		Corroded nails
1	100	Slag	1	1		Poss slag frag
1	101	Ceramic	10	40	Medieval	Reduced greenware
1	101	Ceramic	46	206	Post Med	Includes Red and buff earthenware, refined white, mocha ware, stoneware, transfer printed
1	101	Clay Pipe	2	5	Post Med	Stem frag x 1, bowl frag x 2
1	101	Glass	15	62	Post Med	Window and bottle glass
1	101	Slag	3	19		
1	102	Ceramic	3	18	Medieval	Reduced greenware. strap handle, oxidised fabric x 1. Sooting
1	102	Ceramic	2	9	Post Med	Red earthenware x 1, stoneware x 1
1	103	Ceramic	1	1	Medieval	Gritty buff ware
1	U/S	Ceramic	7	3	Post Med	Includes white and red earthenware

1	U/S	Glass	5	5	Post Med	Bottle glass green x 1, clear x 1. Window glass green x 2, clear x 1
1	U/S	Iron	5	15		Corroded nail frags
2	200	Ceramic	2	5	Medieval	Reduced greenware
2	200	Ceramic	21	33	Post Med	Includes refined white ware, red earthenware, transfer printed, manganese ware
2	200	Clay Pipe	1	3	Post Med	Stem frag
2	200	Glass	4	12	Post Med	Clear glass, melted glass
2	202	CBM	9	473	Post Med	Tile frags x 8, brick frag x 1
2	202	Ceramic	7	17	Post Med	Includes refined whiteware, transfer printed
2	202	Clay Pipe	1	3	Post Med	Stem frag
3	300	Ceramic	16	90	Medieval	Several fabrics, thumbed decoration x 1
3	300	Ceramic	27	33	Post Med	Includes refined white earthenware, glazed red earthenware, stoneware, transfer printed
3	300	Clay Pipe	14	25	Post Med	12 x stem, 2 x bowl frags
3	300	Glass	9	23	Post Med	Bottle glass 8 x green, 1 x clear
3	300	Lead	2	43		Misc fragments
3	300	Slag	1	2		Glassy slag frag
3	301	CBM	2	18		Misc fired clay frags
3	301	Ceramic	66	489	Medieval	Various fabrics. Wavy lines x 1, thumbed decoration x 4, applied pellets x 2
3	301	Ceramic	4	7	Post Med	Red earthenware x 1, refined whiteware x 1
3	301	Flint	1	1	Prehistoric	White flint blade frag
3	301	Iron	3	23		Corroded nail frags
3	301	Lead	1	25		Lead strip frag
3	302	Ceramic	2	6	Medieval	Buff gritty ware x 1, reduced greenware x 1
3	303	Ceramic	6	14	Medieval	Various fabrics
4	400	CBM	5	36	Post Med	Brick/ tile fragments
4	400	Ceramic	3	7	Medieval	Reduced greenware
4	400	Clay Pipe	1	2	Post Med	Bowl frag
4	400	Glass	24	40	Post Med	Clear window x 17, clear bottle x 5, green bottle x 1, waste x 1
4	400	Iron	2	122	Post Med	Corroded nail x 1, screw x 1
4	401	CBM	3	55	Post Med	Tile frags
4	401	Ceramic	1	4	Medieval	Reduced fabric
4	401	Ceramic	8	101	Post Med	Includes refined white, transfer printed, lustreware, flowerpot
4	401	Glass	2	5	Post Med	Clear glass, bottle x 1, window x 1
4	401	Graphite	1	1	Post Med	Graphite stylus
4	401	Iron	3	77	Post Med	Heavily corroded nails
4	401	Mortar	2	77		Lime mortar fragments
5	500	Ceramic	7	9	Post Med	Refined white earthenware, transfer printed, scalloped edge
5	500	Iron	1	26		Highly corroded nail
5	501	Ceramic	25	128	Medieval	Several fabrics
5	501	Ceramic	59	134	Post Med	Includes red glazed earthenware, refined whiteware, transfer printed, spongeware, stoneware, spongeware
5	501	Clay Pipe	3	7	Post Med	Stem frags
5	501	Cu Alloy	1	7	Post Med	Bent disk - poss old penny? No details

5	501	Glass	13	36	Post Med	Green bottle glass x 9, clear bottle glass x 5, melted glass x 1, window glass x 1
5	501	Graphite	1	2	Post Med	Stylus
5	501	Iron	4	74		Corroded nail and misc frags
5	501	Slag	1	26		
5	501	Stone	1	4		Misc fragment - possibly worked?
6	600	CBM	2	21	Post Med	Tile frags
6	600	Ceramic	4	25	Medieval	Reduced fabric
6	600	Ceramic	73	210	Post Med	Includes refined white earthenware, glazed red earthenware, stoneware, spongeware, transfer printed
6	600	Clay Pipe	4	7	Post Med	Stem frags
6	600	Cu Alloy	1	27	Post Med	Pipe with screw threads at on end 8mm diam
6	600	Glass	6	32	Post Med	Bottle glass 1 x green, 3 x clear. Window glass x 2
6	600	Iron	7	75	Post Med	Heavily corroded nail, key, misc
6	601	Glass	1	1	Post Med	Blue glass bead
6	602	Ceramic	2	24	Medieval	Reduced fabric and sandy fabrics
6	602	Slag	1	76		Slag?
6	600/601	CBM	15	67	Post Med	Brick/ tile fragments
6	600/601	Ceramic	30	38	Post Med	Includes refined whiteware, red earthenware, transfer printed, spongeware
6	600/601	Clay Pipe	1	2	Post Med	Stem frag
6	600/601	Glass	19	73	Post Med	Clear window x 9, clear bottle x 6, melted glass x 3, moulded glass x 1
7	700	Ceramic	2	4	Medieval	Poss med sherd x 2, sandy buff fabric, overfired. Footring
7	700	Ceramic	50	190	Post Med	Includes refined whiteware, red earthenware, transfer printed, stoneware, flowerpot
7	700	Ceramic	1	4	Post Med	Marble?
7	700	Clay Pipe	1	5	Post Med	Stem frag x 1, bowl frag x 1
7	700	Glass	16	53	Post Med	Window glass clear x 10, green bottle x 6
7	700	Iron	2	68		Highly corroded nail x 1, misc x 1
7	700	Slag	1	11		Glassy slag frag
7	700	Stone	1	3		Sandstone fragment with traces of slag/glaze attached
7	701	Ceramic	2	3	Medieval	1 x pale green glazed-overfired poss med. 1 x sandy partially reduced
7	701	Ceramic	27	107	Post Med	Includes flowerpot. Red earthenware, refined white, transfer printed, stoneware, slipware
7	701	Clay Pipe	4	9	Post Med	Stem frags
7	701	Glass	8	10	Post Med	Clear window glass x 6, green bottle x 2
7	701	Glass	1	1	Post Med	Glass eye
7	701	Iron	4	88		Misc fragments
Total			**813**	**4053**		

5.2 Medieval Ceramics

5.2.1 A total of 147 sherds of medieval pottery, weighing 868g, were recovered from 17 deposits, representing 19% of the total finds assemblage (Tables 1 and 2). Medieval pottery was present in all seven of the test pits, with over 60% of that total coming from Test Pit 3.

Test Pit	***Context***	**Material**	**Quantity**	**Date**	**Comments**	**Rim**	**Base**	**Glaze**	**Sooting**
1	*100*	Ceramic	3	13th-16th	Sandy oxidised fabric x 1, Overfired reduced rim sherd x 1, reduced greenware x 1	1		1	
1	*101*	Ceramic	10	13th-16th	Reduced greenware x 3, Partially reduced x 3, sandy reduced x 1, sandy oxidised x 3	1	1	7	
1	*102*	Ceramic	3	13th-14th	Reduced greenware. Strap handle, oxidised fabric x 1 with sooting			2	
1	*103*	Ceramic	1	12th-13th	Gritty buff ware				
2	*200*	Ceramic	1	14th-16th	Reduced greenware			1	
3	*300*	Ceramic	16	13th-14th	Reduced greenware. Thumbed decoration x 1. Partially reduced gritty and sandy fabrics	1	1	8	1
3	*301*	Ceramic	66	13th-16th	Partially reduced gritty and sandy fabrics, Reduced greenware. Wavy lines x 1, thumbed decoration x 4, Applied pellets x 2	5	4	40	2
3	*302*	Ceramic	2	13th-16th	Buff gritty ware x 1, reduced greenware x 1			1	
3	*303*	Ceramic	6	13th-16th	Buff gritty ware x 2, reduced greenware x 1, partially reduced x 2, sandy oxidised rim x 1	1		2	1
4	*400*	Ceramic	3	Medieval	Reduced greenware			3	
4	*401*	Ceramic	1	13th-14th	Sandy oxidised fabric			1	
5	*501*	Ceramic	25	12th-16th	Gritty ware, partially reduced sandy fabrics, reduced		1	22	2
6	*600*	Ceramic	4	13th-14th	Reduced sandy fabric x 1, partially reduced x 3				
6	*602*	Ceramic	2	13th-16th	Reduced x 1, sandy oxidised x 1			1	
7	*700*	Ceramic	1	Medieval	Poss med sherd, sandy buff fabric, overfired				
7	*701*	Ceramic	2	Medieval	1 x pale green glazed-overfired poss med. 1 x sandy partially reduced		1	1	6

Table 2: Medieval Ceramics

5.2.2 As has been identified during earlier archaeological investigations, the medieval pottery recovered in Appleby does not exactly correspond to other assemblages in Cumbria, but does have close parallels, and has more in common with the medieval ceramic traditions seen in the North West than those of the North East (McCarthy and Brooks 1988). As has been noted, the location of Appleby on a main cross-Pennine route means that it is reasonable to expect material from both the east and the west (Brooks, McCarthy and Railton 2013).

5.2.3 For the purposes of this assessment, fabrics have been identified using to the following groups:

- Gritty ware - dominant in the North throughout the 12th century, continuing into the mid-13th century. Red and Buff Gritty wares present
- Lightly gritted/ coarse Sandy wares – 13th-14th century
- Partially Reduced ware – 13th-14th century
- Late Medieval Reduced ware – part of a widespread Northern Reduced Greenware tradition seen across both the North West and the North East. 14th-16th century
- A number of fabrics do not closely match Cumbrian fabrics and have been given a broad 'medieval' date.

5.2.4 The small size of the sherds within the assemblage appears to be typical within Appleby. It is noteworthy that although the sherds are small, they are not particularly abraded, and it is reasonable to assume that the fragments have not moved far from the original point of deposition.

5.2.6 Both cooking pots and jugs are present within the assemblage but with the exception of nine rim sherds there are few diagnostic sherds. Decoration consists of thumb prints, both on handle base seen within **(301)** and thumbed bands. A single rim sherd had incised wavy line decoration and a small body sherd from **(400)** has horizontal rouletting. Two body sherds of highly decorated jugs are impressed 'wheat ears' were recovered from **(301)**.

5.2.7 The majority of the medieval ceramics appear to date to the 13th-14th century with a smaller amount of later reduced wares.

5.3 Post-medieval Ceramics

5.3.1 A total of 398 sherds of post medieval ceramics, weighing 1147g, were recovered from all seven test pits. The sherds were generally small and in poor to moderate condition. A range of post medieval fabrics are present, with the majority comprising plain refined white earthenware and Transfer Print ware of 19th-20th century date. Black and brown glazed red earthenware and stoneware fragments were also recovered which could date from 17th- late 19th century. The small size of the sherds make it difficult to accurately identify form type, but the post medieval ceramics are all utilitarian, comprising plate sherd, teacups, storage jars and flower pots.

5.4 Clay Pipe

5.3.1 A total of 45 fragments of clay tobacco pipe, weighing 90g, were recovered from all seven of the test pits, with over half coming from the garden soil in Test Pits 1, 2 and 3.

5.3.2 With the exception of rilling seen on a number of the fragments, no decoration was noted and no maker's marks were present. The stem-hole size was measured to give an idea of the date for these fragments (Table 3) although should only be considered a rough guide. An overall date of 17th-18th century is appropriate for the clay pipe (Oswald 1975).

Table 3: Binford's Pipestem Chronology (Kipfer 2008, 8)

Stem-Hole Ø (in/XX)	***Conversion (mm) 1 inch = 25.4mm 1/64 (inch) = 0.4mm***	***Dates***
9/64	9 x 0.4mm = 3.6	1590 – 1620
8/64	8 x 0.4mm = 3.2	1620 – 1650
7/64	7 x 0.4mm = 2.8	1650 – 1680
6/64	6 x 0.4mm = 2.4	1680 – 1720
5/64	5 x 0.4mm = 2	1720 – 1750
4/64	4 x 0.4mm = 1.6	1750 - 1800

5.5 Glass

5.5.1 A total of 123 fragments of glass, weighing 353g, were recovered from all seven test pits, in moderate to good condition. Both green and clear bottle shards are present, and clear window glass. The glass is late post-medieval to modern in date.

5.6 Metal

5.5.1 A total of 39 fragments of metal, weighing 682g, were recovered from all test pits with the exception of Test Pit 2, consisting of 34 iron objects weighing 580g. The artefacts are generally highly corroded and in poor condition.

5.6.2 Many of the iron objects are nails – both handmade and machine made. A corroded iron key was recovered from **(600)** which is likely to be post-medieval in date. Three lead fragments, weighing 68g, were also collected, along with two copper alloy weighing 34g. The copper alloy artefacts comprise a modern pipe and a bent disc which may be have been an old penny, although no detail can be seen.

5.6.3 While it is difficult to date the metal artefacts, partly because of the levels of corrosion, a post-medieval to modern date is suitable for most of the assemblage. Handmade nails were manufactured in similar way over a wide time frame, and could have a medieval to post-medieval date.

5.7 Flint

5.7.1 A single flint fragment of a blade or bladelet was recovered from **(301)** in Test Pit 3. The fragment is heavily patinated white but is probably of a grey flint, and is of potential Mesolithic - early Neolithic date (*Pers. Comm*. D. Jackson).

5.8 Miscellaneous

5.8.1 A small number of miscellaneous finds were also recovered which are in good condition. These include a small blue glass bead, a glass eye perhaps belonging to a doll, and a ceramic marble. Two fragments of graphite stylus were recovered from TP4 and TP5. They are of post-medieval to modern date.

5.9 Finds from Trenches TR1 & TR2

5.8.3 A total of 327 artefacts, weighing 14,748g, were recovered from the two evaluation trenches at Castle Bank, Appleby. Quantification of the finds assemblage from Castle Bank is included in Table 4, below.

Context Number	Trench	Qty	Wgt (g)	Material	Period	Notes
100	1	23	247	Bone	Post Medieval	Animal bone, some with butchery cuts
100	1	6	130	Ceramic	Post Medieval	Brick fragments, field drain
100	1	1	3	Pottery	20th cent	Paint pot - 'Reeves School'
100	1	4	10	Glass	Post Medieval	Clear bottle and window glass
100	1	10	91	Iron	Post Medieval	Nails and shoe cleat - highly corroded
100	1	2	42	Plaster	Post Medieval	Internal plaster, white paint, impressions of lathe and plaster
100	1	38	183	Pottery	19th - 20th cent	White earthenware, transfer print, banded ware, stoneware. Tableware
100	1	7	154	Pottery	18th - 20th cent	Red earthenware, unglazed. 1 base sherd internal black glaze
100	1	1	129	Stone	Post Medieval	Green slate roof tile fragment
100	1	1	42	Metal	20th cent	Toy bus - Charbens Toys
100	1	1	4	Cu Alloy	19th - 20th cent	Military button - Lion and Unicorn
100	1	1	10	Cu Alloy	20th cent	Coin - 1927 - Penny
101	1	1	1	Clay pipe	Post Medieval	Stem fragment, yellow glaze
101	1	3	26	Glass	Post Medieval	Melted glass
101	1	3	189	Iron	Post Medieval	Nail, 2 fragments of corroded object with cu alloy end and collar
101	1	3	64	Plaster	Post Medieval	Internal plaster, white paint, impressions of lathe and plaster
101	1	10	33	Pottery	19th - 20th cent	White earthenware, transfer print. Tableware, imitation egg
101	1	2	14	Pottery	18th - 20th cent	Red earthenware. Worn handle and teapot lid
102	1	4	13	Bone	Post Medieval	Animal bone
102	1	1	2	Glass	20th cent	Window glass
102	1	3	36	Iron	Post Medieval	Nails - highly corroded
102	1	6	58	Plaster	Post Medieval	Internal plaster, white paint, impressions of lathe and plaster

102	1	11	34	Pottery	19th - 20th cent	White earthenware, transfer print, stoneware. Tableware
102	1	3	16	Pottery	19th - 20th cent	Red earthenware - flower pot
103	1	6	94	Bone	Post Medieval	Animal bone
103	1	2	331	Ceramic	Post Medieval	Drainage tile. Mixed yellow and red clay
103	1	7	108	Plaster	Post Medieval	Internal plaster, white paint, impressions of lathe and plaster
103	1	1	4	Plaster	Post Medieval	Internal plaster, white paint, impressions of lathe and plaster
103	1	2	25	Pottery	Medieval	Base sherd - internal glaze, body sherd - external glaze
103	1	2	1784	Stone	Post Medieval	Red sandstone floor tiles, traces of mortar
103	1	3	477	Stone	Post Medieval	Green slate roof tile fragments
108	1	1	16	Bone	Post Medieval	Animal bone
108	1	2	8	Pottery	18th - 19th cent	Red earthenware, internal slipware, flatware
200	2	1	1	Bone	Post Medieval	Animal bone
200	2	42	253	Bone	Post Medieval	Animal bone
200	2	3	73	Ceramic	19th - 20th cent	Wall tile fragments
200	2	3	130	Ceramic	Post Medieval	Roof tile fragment
200	2	1	8	Cu Alloy	Post Medieval	Strip
200	2	12	50	Glass	19th - 20th cent	Green and clear bottle and window glass, 1 x melted
200	2	1	36	Glass	19th - 20th cent	Milk glass, jardiniere?
200	2	8	160	Iron	Post Medieval	Nails, corroded. Both handmade and machine-made domed (roofing?) with wedge tip
200	2	35	144	Pottery	19th - 20th cent	White earthenware, transfer print, hand painted, banded ware. Table ware
200	2	17	206	Pottery	18th - 20th cent	Red and buff earthenware, stoneware. Storage jars, tablewares, flowerpot
201	2	2	73	Iron	Post Medieval	Handmade nails - corroded
204	2	3	13	Clay pipe	Post Medieval	Stem fragments
204	2	2	340	Iron	Post Medieval	Nail within wood, Knife blade highly corroded
204	2	7	3067	Plaster	Post Medieval	Internal plaster, impressions of lathe and plaster
204	2	3	8	Pottery	19th - 20th cent	White earthenware, printed ware. Table ware

204	2	3	3038	Stone	Post Medieval	Red sandstone floor tiles, traces of mortar
204	2	2	74	Stone	Post Medieval	Green slate roof tile fragments
204	2	1	2524	Stone	Post Medieval	Split sandstone cobble with mortar traces on split face
U/S		2	48	Bone	Post Medieval	Animal bone
U/S		1	6	Ceramic	20th cent	Wall tile - sage green
U/S		8	119	Pottery	18th - 20th cent	White and red earthenware, stoneware
Total		**327**	**14748**			

Table 4: Quantification of Castle Bank Bulk Finds by Context

5.10 Ceramics

5.10.1 A total of 139 sherds of pottery, weighing 947g, were recovered from the trenches, with only eight sherds (weighing 119g) coming from unstratified deposits (Table 4).

5.10.2 The earliest pottery recovered from the site was two sherds of medieval pottery from context **(103)** comprising one base sherd and one body sherd. The base sherd has a flat base and is glazed internally, while the body sherd is glazed externally. Both sherds are wheel-thrown and of a sandy partially reduced fabric, similar to Penrith Buff Sandy ware, (Penrith Fabric 4, Carlisle Fabric 13) likely to date to 13th – 14th century (Brooks 2000).

5.10.3 A wide range of domestic and utilitarian vessels are represented in the bulk of the pottery recovered from both trenches, including storage jars and pancheons, plates, cups and bowls, and part of a teapot lid. The black and brown glazed, red and buff earthenwares were probably locally made, while the stonewares and refined whitewares were factory-made, probably in the potteries of Staffordshire (Hildyard 2005, Poole 1995). A few of the red earthenware sherds are very worn, but for the most part the sherds are fairly unabraded.

5.10.4 With the exception of the medieval sherds, the pottery dates from the 18th to 20th centuries, with the majority probably dating to the 19th century.

5.10.5 Other ceramic objects include a ceramic 'dummy' egg, used to encourage nesting in chickens, and a tiny paint pot which would have formed part of a watercolour set. Both are of 20th century in date.

5.10.6 A small quantity of ceramic building material was also recovered; a total of 15 fragments, weighing 670g, included red brick fragments, land drain and roof tiles, as well as modern glazed wall tiles. Two fragments of ceramic horseshoe drainage tile were recovered in-situ from context **(103)** and comprise a mottled red and yellow mixed fabric dating to 18th – 19th century, while the remaining fragments were all from topsoil deposits.

5.11 Clay Pipe

5.11.1 Four fragments of clay pipe stem were recovered from context **(101)** and **(204)**, weighing 14g. They are in good condition and show very little signs of wear. One of the fragments had a yellow glaze at the end of the stem. Aside from this, the most interesting thing about the fragments is their length, with conjoining fragments from context **(204)** measuring 190mm in length.

5.11.2 Very long clay pipe stems were manufactured in the mid-18th century of up to 18 – 24 inches (450-600mm); from the 1850's, pipe stems were even sometimes as long as 36 inches (900mm). No maker's marks are present on any of the fragments but the stem bore-hole is c. 2mm giving a late 18th to 19th century date (www.cafg.net).

5.12 Glass

5.12.1 Twenty-one shards of glass, weighing 124g, were recovered from the two trenches. The glass comprises fragments of both green and clear bottle glass as well as window glass. Of note is a large 19th century milk glass fragment recovered from deposit **(200)**. The glass fragments are in moderate condition and are of 19th to 20th century date.

5.13 Metal

5.13.1 Thirty-two metal artefacts, weighing 953g, were recovered from both trenches. The metal objects are in poor to moderate condition.

5.13.2 The majority of the metal assemblage comprises iron nails, most of which are heavily corroded. Both hand-made and machine-made nails are present. Of interest is a heavily corroded large knife blade from context **(204)**. An unidentified iron pipe was also recovered from context **(101)** with a copper alloy cap.

5.13.3 A narrow cleat from context **(103)** may have been used to shoe a clog; wooden clogs were individually made and shod with replaceable irons to ensure long-term wear and were commonly used throughout the north up until the early 20th century (chrisbrady.itgo.com/clogmaker).

5.13.4 A George V 1927 penny and a military button depicting a lion and a unicorn were recovered from topsoil **(100)**, along with an orange toy bus with the toy manufacturer Charbens Toys named on the side. Charbens Toys were based in North London and this particular model - the Charbens number 3 bus (Type 1), was part of the 'Old Crocks' range made between 1955 and the late 1960s (www.charbens.co.uk; www.vintagebritishdiecasts).

5.14 Stone

5.14.1 Twelve stone fragments, weighing 8026g, were retained during the evaluation. Six of these are green slate roof tile fragments, one of which still retains a round fixing hole. Five fragments of red stone floor tiles were recovered from contexts **(103)** and **(204)**. The floor tiles do show some sign of wear and retain traces of lime mortar. The remaining stone artefact is a split sandstone cobble recovered from context **(204)**, which also has traces of lime mortar on the split face. The stone fragments are fairly small but provide important details about the building construction.

5.15 Plaster

5.15.1 Twenty-six fragments of lime mortar plaster were recovered from the evaluation, weighing 3,343g. The fragments from Trench 1 are small and retain imprints of a lathe and plaster wall lining, and were painted white. The fragments from Trench 2 are larger pieces and contain large inclusions which may include part of the cobble core of a rough wall.

5.15.2 All fragments are probably internal wall-lining; unusually, they do not appear to have the addition of animal hair which is often added to avoid cracks in the plaster.

5.16 Discussion

5.16.1 The medieval pottery, although being of limited archaeological value, is significant when considered alongside the earlier assemblages. Further analysis of the medieval and early post medieval ceramics would be worthwhile which could result in tighter date ranges and fabric groups.

5.16.2 The recovery of a prehistoric flint tool is a significant in that it is to date the only prehistoric find from within Appleby-in-Westmorland. Although this is likely to be a casual loss, it does indicate prehistoric activity in the vicinity.

5.16.3 In terms of the objectives of the Dig Appleby project the distribution and date range of the medieval pottery is a useful indication of archaeological potential.

5.16.4 The finds assemblage recovered from the two trenches at Castle Bank revealed traces of building construction, as seen with the red sandstone floor tiles, cobble-wall construction, lathe and plaster imprints in the lime plaster, and green slate roof tiles.

5.16.5 The pottery dates largely to the 19th century, although there were also small quantities dating from the 18th and 20th centuries and is typical of household domestic assemblages (Licence 2015). Two medieval pottery sherds were also recovered; however, these are likely to be residual, although they show little signs of wear.

5.16.6 Overall the finds assemblage from Castle Bank is typically domestic, is of local interest, and hints at an earlier domestic history.

6. ENVIRONMENTAL ANALYSES

6.1 Environmental remains from Test Pits TR1-TR7

5.16.7 During the course of the excavations no suitable samples were identified for the purposes of archaeobotanical analysis. However, a total of 150 animal bones, weighing 561g, were hand-collected during the archaeological investigations and submitted to Wardell Armstrong Archaeology for zooarchaeological analysis (Tables 5 & 6). The condition of the bone is good in the main.

5.16.8 Guidelines adhered to for zooarchaeological analysis include *Animal Bones & Archaeology: Guidelines for Best Practice* (Historic England 2014) plus reference material from Schmid (1972), Serjeantson (1996) and Hillson (1992). Measurements follow von den Driesch (1976). Aging follows guidelines in Grant (1982). The author's in-house skeletal reference collection was also used to aid identification of species.

6.2 Zooarchaeology

6.2.1 A minimum of 21 animals are represented in this assemblage, including six cows, four sheep, two Rodentia, two goat/sheep, two cow/horse and one of cow/sheep, Rabbit/Rodent, Small Mammal, Rabbit and Chicken (Table 4). The environmental assemblage has been assessed for its local, regional and national potential and for its potential to contribute to the relevant research frameworks.

6.2.2 Evidence of butchery was present on a cow scapula and tibia. Pathologies were not evident on any of the bones. Due to the condition of the bone, it is likely that the animal remains are fairly modern (late post-medieval to early 20th century).

6.3 Shell

6.3.1 Two fragments of shell, weighing 1g, were also recovered from deposit (100). The fragments are in poor to moderate condition. The fragments comprise a partial bivalve shell and a partial mussel shell. The fragments have been subjected to burning; they were recovered in conjunction with burnt animal bone.

Table 5: MNI count of species

Species	***MNI Count***
Rodentia (Rodent family)	2
Gallus gallus (Chicken)	1
Orcytolagus (Rabbit)	1
Sus scrofa (Pig)	0
*Ovies aries (*Sheep)	4
Bos Taurus (Cow)	6
Equus callabus (Horse)	0
Caprid/Ovid (Goat/Sheep)	2
*Equus/Bos (*Horse/Cow)	2
*Bos/Ovis (*Cow/Sheep)	1
Orcytolagus/Rodentia (Rabbit/rodent)	1
Small mammal	1
TOTAL	**21**

Table 6: Quantification of Ecofacts by Context

Context	**Material**	**Qty**	**Wgt (g)**	**Comments**
100	Animal Bone	10	9	1 x *Rodentia* mandible; 1 x *Gallus?* Limb bone; 1 x *Equus/Bos* rib, 7 unidentifiable fragments
101	Animal Bone	21	41	Unidentifiable fragments; *Bos* cranial frag, misc limb bone frag, cow DP tooth
102	Animal Bone	2	6	1 x *Bos* incisor; Limb bone fragment, small-medium sized mammal
200	Animal Bone	3	3	Not identifiable fragments
202	Animal Bone	4	21	3 x *Bos* scap frags (chop-mark to one frag), 1 x neonatal tibia (*Bos/Ovis?)*
300	Animal Bone	3	2	Not identifiable fragments
301	Animal Bone	35	257	1 x *Equus/Bos* limb bone, 4 other misc frags; *Bos:* molars, pelvis fragment, rib fragment; 9 other misc frags; *Bos: 2* x molars, 3 x pelvis frags, distal tibia portion; *Ovis*: distal metacarpal portion; 1 x *Octyrolagus* / *Rodentia* tooth
302	Animal Bone	3	3	Unidentifiable fragments
303	Animal Bone	3	4	Limb bone fragments - misc
400	Animal Bone	2	2	Unidentified limb bone fragments
500	Animal Bone	2	5	Unidentified limb bone frag, 1 x unidentified pelvis frag
501	Animal Bone	33	107	*Bos:* rib, incisor, molar, PM; *Ovid:* femur?, astralagus, distal humerus, 2 prox phalanges, hoof, partial mandibular ramus, molar, partial distal metacarpal; 1 x *Oryctolagus?* Radius; 19 unidentifiable fragments
600	Animal Bone	9	3	2 x vert fragment; *Ovis:* proximal tibial head (juvenile), radius shaft; mandibular ramus portion, cranial fragment
700	Animal Bone	7	18	1 x *Equus/Bos* scap/pelvis fragment; Miscellaneous limb frags

701	Animal Bone	7	71	1 x *Bos* tibia (5 chop-marks present on shaft); 1 x partial *Rodentia* tibia; distal R humerus of *Ovis,* ulna of small mammal; 3 x unidentified limb bone frags
600/601	Animal Bone	3	6	1 x rib fragment - *Caprid/Ovid*
u/s	Animal Bone	3	3	2 x limb bone frags, 1 x unidentifiable tooth
600	Human bone	1	2	Human maxillary incisor
400	Shell	2	1	
TOTAL		**153**	**564**	

6.4 Human Bone

6.4.1 A single maxillary human incisor was recovered from topsoil deposit **(600)**. The tooth is in good condition (Table 5). The tooth likely represents a casual loss and can add nothing to the site interpretation. No further analysis is warranted.

6.5 Environmental remains from Trenches TR1 & TR2

6.5.1 A total of 78 fragments of animal bone, weighing 671g, were recovered from five stratified deposits within the Castle Bank trenches (Tables 7 and 8). The condition of the animal bone is excellent in the main. Age-at-death was classified as either adult or juvenile; determination of sex was not undertaken. Measurements could not be taken as no complete limb bones were present.

Context	**Trench**	**Qty**	**Wgt (g)**	**Date**	**Identification and notes**
100	1	23	247	PM	Bos femoral shaft (butcher); Bos pelvis (butcher); Ovid prox & shaft tibia (butcher) (juv); Ovid ulna; Gallus / Phasianinae prox femur, Gallus tibia, tarsometatarsus (dist), prox humerus & unidentified limb; prox femur Anser sp.; several rib fragments belonging to Bos, Ovid & Oryctolagus
102	1	4	13	PM	Ovid metatarsel (shaft); unidentified bone x 2; Ovid rib fragment
103	1	6	94	PM	Bos scap (butcher); 2 x Ovid sesamoids; dist Ovid metacarpal (juv); dist Ovid humerus (juv); misc medium / sized mammal limb bone
108	1	1	16	PM	Ovid partial metatarsel (proximal and shaft)
200	2	42	253	PM	3 Bos vert (butcher), 1 Bos scap (butcher), 1 Bos rib (partial); Ovid dist hum (Ri) (butcher), prox & dist tib (butcher), partial shaft Ovid radius, Ovid dist metacarpal; 6 unidentified bones; 3 ribs Ovid/Sus; 25 bones from a minimum of 2 Gallus / Anser
U/S	-	2	48	PM	Bos mid-shaft (butcher); Oryctolagus / Lepus tib (dist)
Total		**78**	**671**		

Table 7: Quantification of zooarchaeological remains

Key:

Bos: Cow
Ovid: Sheep
Sus: Pig
Oryctolagus / Lepus: Rabbit / Hare
Gallus sp: Chicken
Anser sp.: Goose
Phasianinae: Pheasant species
Juv: Juvenile
Prox: Proximal
Dist: Distal
Butcher: butchery marks evident

6.5.2 A minimum number of 19 animals are represented in this small assemblage, comprising four cows (Bos sp.), seven sheep and two lambs (Ovid sp.), a chicken (Gallus sp.), a goose (Anser sp.), two rabbits (Oryctolagus sp.) and four animals which have been classified as probable species (Ovid / Sus (Sheep / Pig): 1; Gallus / Anser sp (Chicken / Goose): 2 and Gallus / Phasianinae (Chicken / Pheasant): 1). No pathologies or instances of trauma were observed.

6.5.3 The assemblage was recovered within close proximity to a farmstead and is highly likely to represent domestic food waste. Butchery marks are evident on at least ten animal bones, with the majority of the chop-marks evident on cows and sheep bones (n = 8 and 2 respectively).

6.5.4 The finds assemblage includes 18th and 19th century ceramics and this assemblage may be contemporary with domestic activity from these periods. However, a date of 18th to 20th century has been attributed to this assemblage. No further analysis is warranted.

6.6 Discussion

6.6.1 The small assemblage of shell and animal bone recovered from the test pits is of low archaeological potential; the vast majority of this assemblage was recovered from topsoil deposits and does not add any significant information to the site stratigraphy or the history of the site.

6.6.2 It is likely that the assemblage has arisen largely from midden deposits, and suggests the range of species being consumed in the post-medieval and modern periods in the town, in addition to the common wild species living nearby.

6.6.3 The zooarchaeological assemblage from the Castle Bank trenches represents domestic food waste associated with a farmstead and is of 18th to 20th century date.

7. CONCLUSIONS

7.1 Interpretation

7.1.1 Archaeological remains of possible medieval and/or post-medieval date were found in six of the test pits (TP1-7) and both the trenches excavated (TR1 & TR2). The remains identified in the test pits were limited to possible medieval or post-medieval surfaces and demolished post-medieval buildings/structures, with a single post-hole identified in Test Pit 3. Given the limited scale of the test-pits this is not entirely unexpected, and the artefactual evidence recovered is as important in terms of helping to define the archaeological potential of the areas sampled.

7.1.2 The artefactual evidence recovered indicated past activity dating from the prehistoric to the modern periods, but focused on the medieval and post-medieval periods. Significant quantities of medieval pottery were recovered during the test pit excavations, which has particular relevance in terms of current phase of the project.

7.1.3 Of the test pits excavated, the greatest concentration of medieval material was recovered from the garden of St Anne's Hospital, although residual medieval material was recovered from each of the test pits to some degree, which is to be expected given the locations close to or within the town centre. This suggests that the lack of post-medieval and modern development at St Anne's Hospital may have helped preserve the evidence from earlier periods.

7.1.4 The two trenches excavated at Castle Bank have successfully confirmed the presence of former buildings as depicted on Hill's 1754 Plan of Appleby-in-Westmorland, and indicate that earlier structures do survive in the less-developed parts of the town. A building of likely post-medieval date has been identified, with evidence surviving for the walls and floors of the building(s), with possible external paths and yards, enclosed by outer banks. Topographic evidence suggests that the site was within a small square field, with evidence of ridge and furrow cultivation to the south. Historic mapping suggests the buildings were demolished between the time of the 1843 Tithe map and the 1859 Ordnance Survey map, which is supported by the finds recovered.

7.1.5 The survival of the archaeological features at Castle Bank was good, and had been influenced by the deposition of a significant depth of later plough soil across the site. In test pits TP1, TP3, TP5 and TP6 the development of garden soils had helped preserve evidence of earlier phases of activity.

7.2 Research Potential

7.2.1 The medieval pottery recovered is significant when considered alongside the earlier assemblages recovered during the archaeological work at Shaw's Wiend (Brooks, McCarthy and Railton 2013). Further analysis of the medieval and early post medieval ceramics would be worthwhile and could result in tighter date ranges and fabric groupings.

7.2.2 There is potential for the survival of medieval and later features within the garden of St Anne's Hospital, and other Boroughgate properties, as demonstrated by the previous archaeological work at Shaw's Wiend. However, the test pitting undertaken to date has been limited in its scale and therefore some larger-scale trench investigations would be required in order to fully explore this potential, as demonstrated by the trenches excavated at Castle Bank during the current project.

7.2.3 The structures revealed at Castle Bank appear to be post-medieval in date, but further excavation (trenches or open areas) would be required to attempt to fully define these features, determine the date of construction of the buildings, and to identify any evidence for earlier (medieval) occupation of this site.

7.2.4 Medieval small towns are a relatively unexplored area of research in the North West, compared to the major urban centres, but these were an integral component of the medieval landscape with great archaeological potential (Saunders 2009). The current project holds the potential to contribute to a number of regional research objectives, as identified in the North West Regional

Research Framework (Brennand 2007, 102-104) with regard to medieval urban settlements in the region, including:

- Research is needed to determine whether new boroughs were newly founded plantations or developments from pre-existing non-urban settlements. What evidence survives for pre-existing settlements?

- Market places were a key element of the townscape, but there has been little work to trace their origins and development in the region. Were they the main element in laying out a town, did they move, grow, contract? What was the impact of market centres on the exchange of local products and their relationship with high-status sites?

- Many towns in the North West were associated with castles. How did defence influence the layout of towns, castles and market places?

- There has been a lack of excavation targeting medieval deposits, in particular very few burgages and medieval house plots have been excavated. There is a need to examine the street frontages in medieval towns as well as the back plots.

- Towns were centres of craft industries and potential centres and dispersers of innovation. Research is needed on technological developments and manufacturing specialisation in towns.

- There is a need to discover to what extent medieval buildings survive behind post-medieval facades, which dendrochronological dating may help to address

- Very little is known about the living conditions of ordinary townspeople, their health and nutrition, which environmental sampling may help to address.

3.5 The Dig Appleby project therefore has the potential to contribute both to a greater understanding of the origins and development of the town of Appleby-in-Westmorland, and to a number of regional research objectives, which it is hoped will be achieved through future phases of the project.

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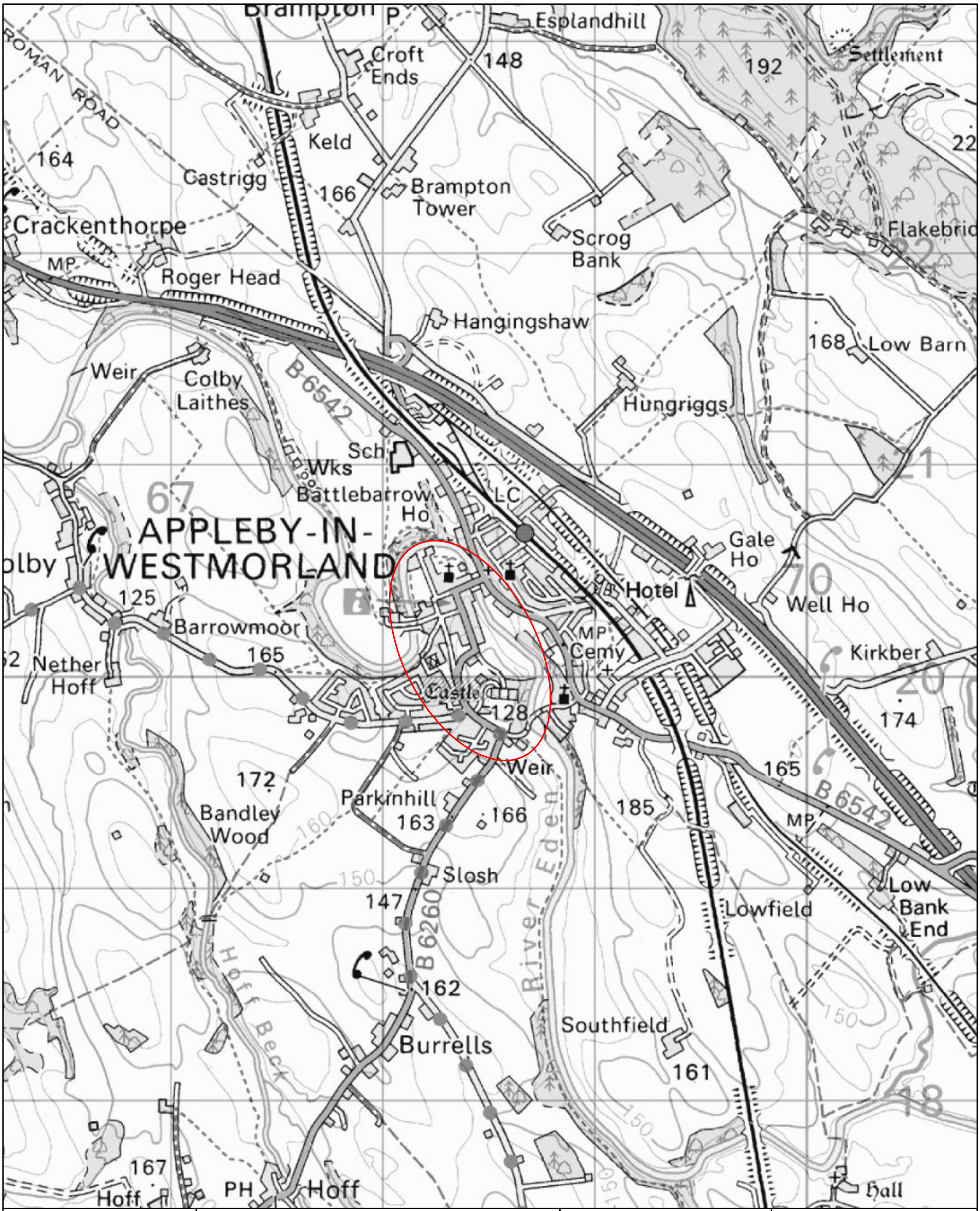
APPENDIX 1: FIGURES



wardell armstrong archaeology

Wardell Armstrong
Archaeology
2017

PROJECT:	Dig Appleby - Breaking the Ground, Appleby-in-Westmorland, Cumbria
CLIENT:	Appleby Archaeology Group
SCALE:	1:25,000 at A4
DRAWN BY:	MDR
CHECKED BY:	MDR
DATE:	May 2017
REPORT No:	DA001/Figure 1

KEY:

Approximate extent of medieval town (based on 1754 map)

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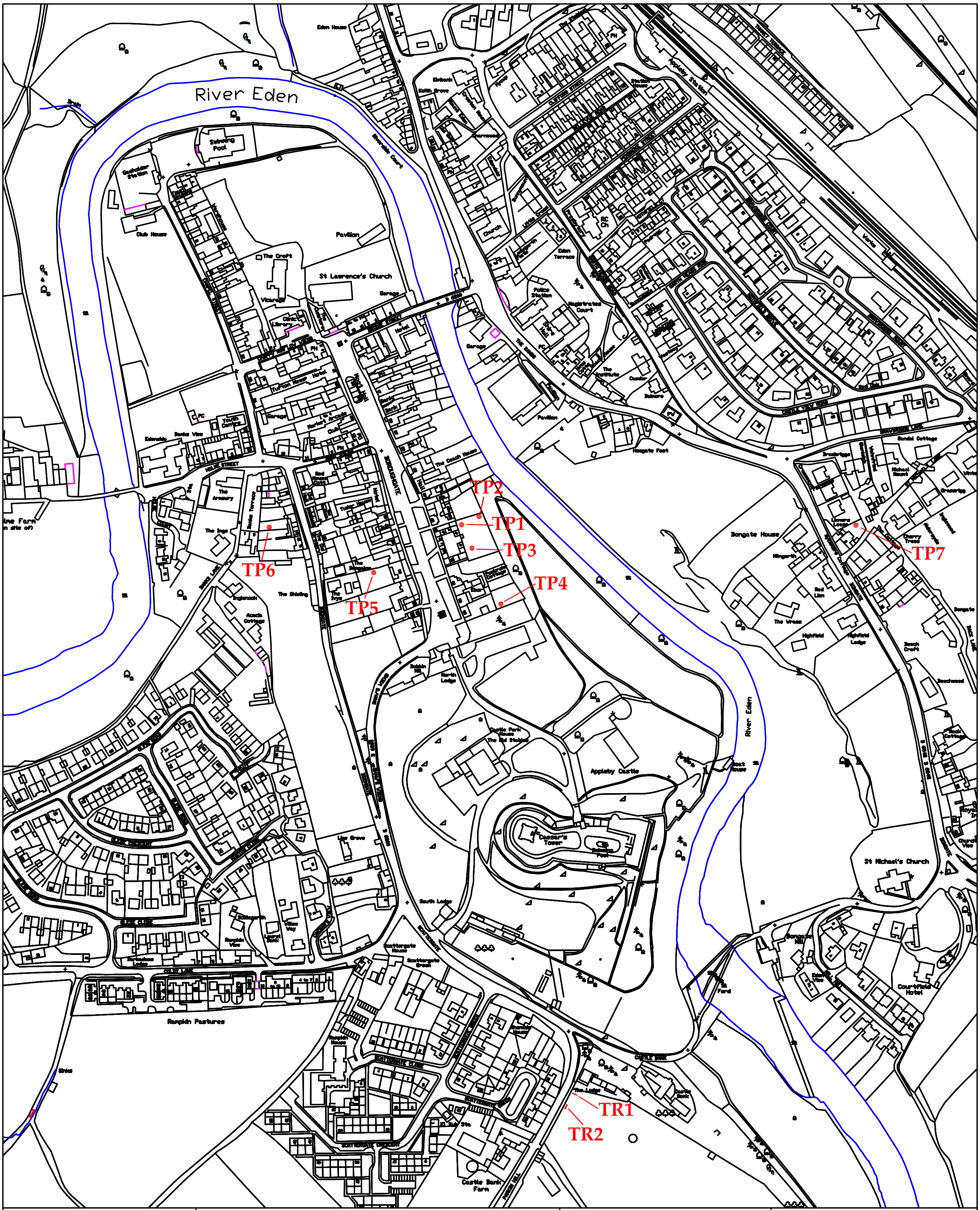
Figure 1: Location of the study area.



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2017

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CLIENT:	Appleby Archaeology Group
SCALE:	1:2,500 at A4
DRAWN BY:	MDR
CHECKED BY:	MDR
DATE:	May 2017
REPORT No:	DA001/Figure 2

KEY:

●	Test pit location
▬	Trench location

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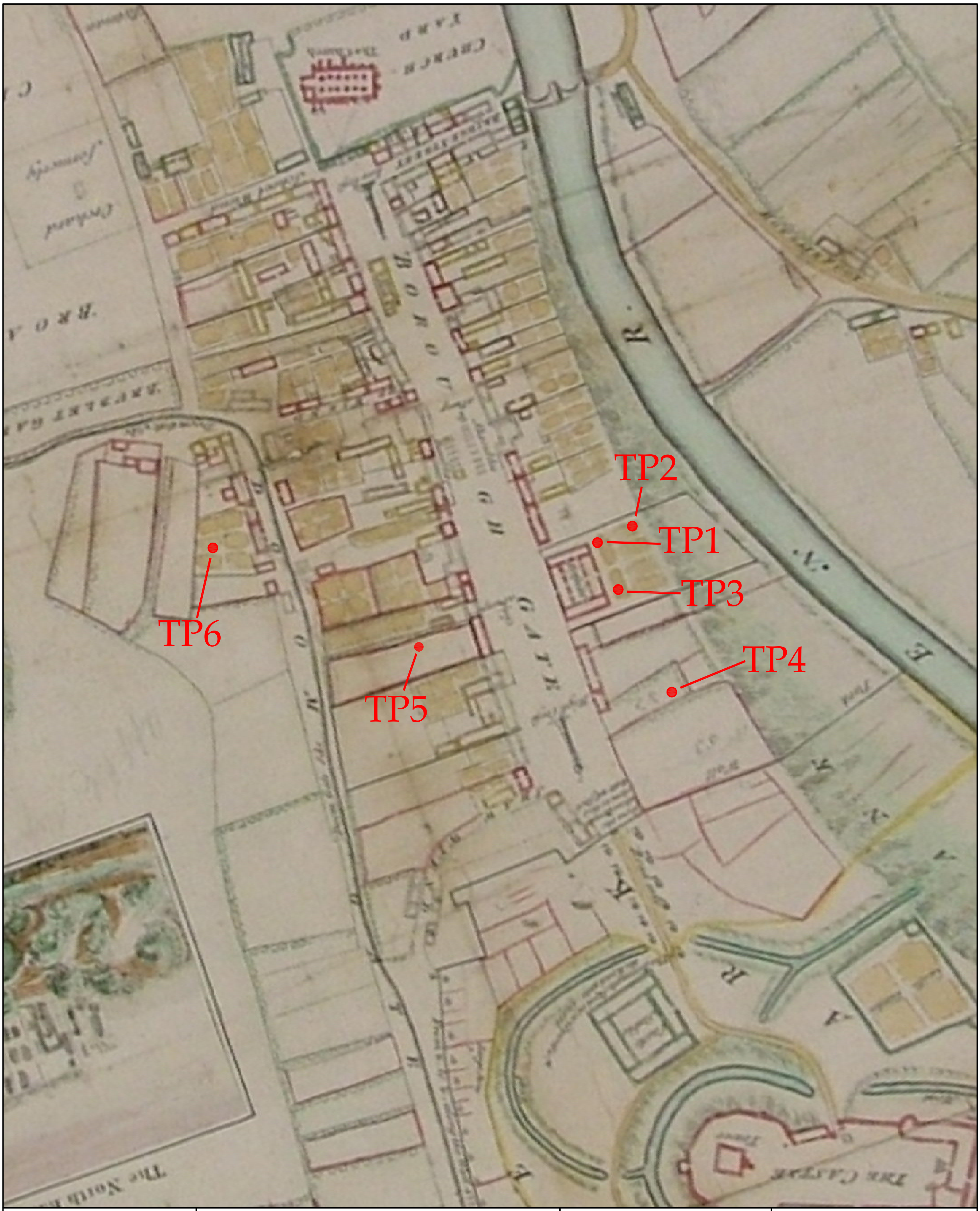
Figure 2: Locations of test pits (TP1-7) and trenches (TR1 & TR2).



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2017

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CLIENT: Appleby Archaeology Group

SCALE: 1:2,500 at A4

DRAWN BY: MDR

CHECKED BY: MDR

DATE: May 2017

REPORT No: DA001/Figure 3

KEY:

● Test pit location

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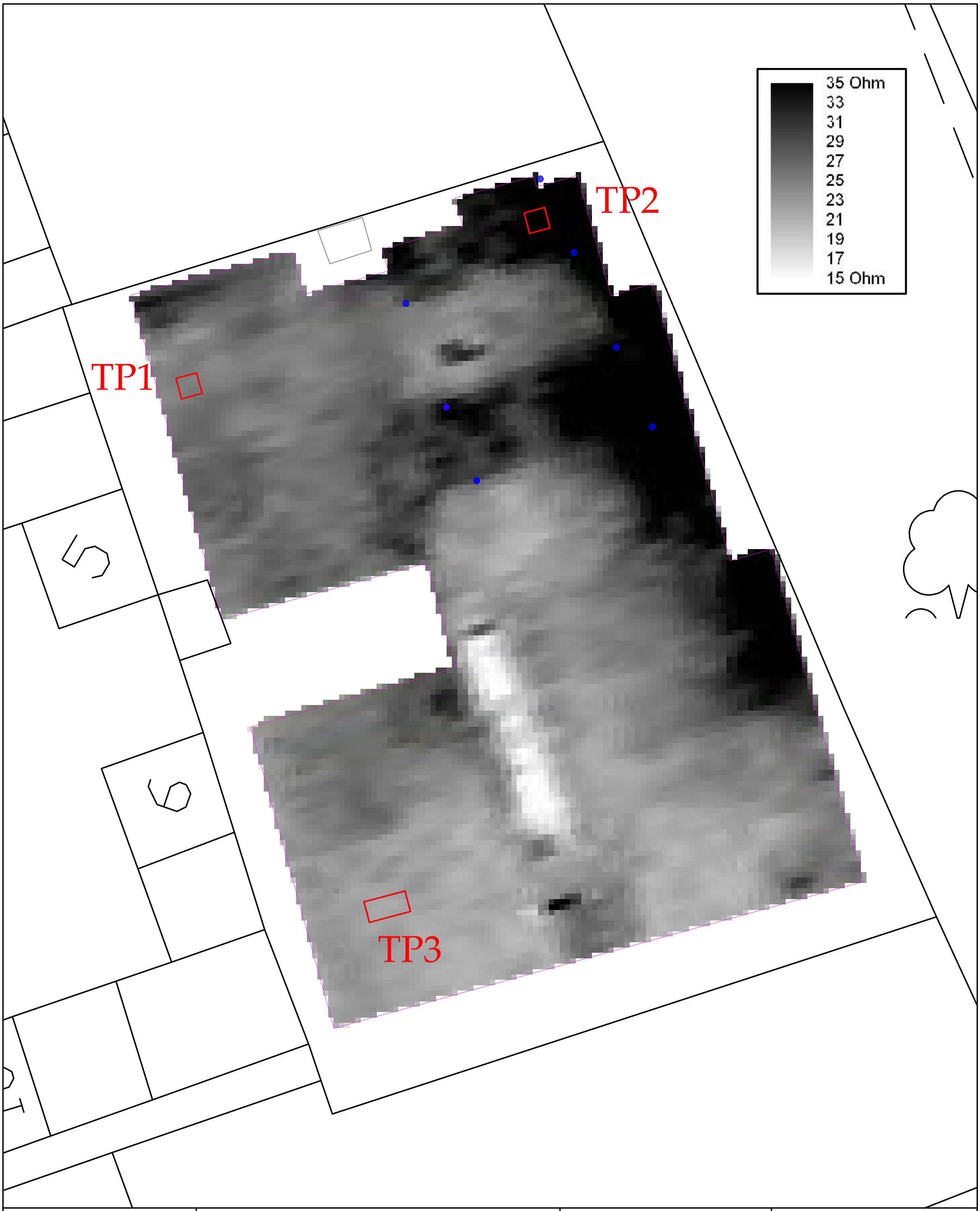
Figure 3: Location of test pits (TP1-6) in relation to Hill's 1754 Plan of Appleby-in-Westmorland.



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Archaeology
2017

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CLIENT: Appleby Archaeology Group

SCALE: 1:250 at A4

DRAWN BY: MDR

CHECKED BY: MDR

DATE: May 2017

REPORT No: DA001/Figure 4

KEY:

▭	Outline of geophysical survey area
◇	Test pit
●	Iron post

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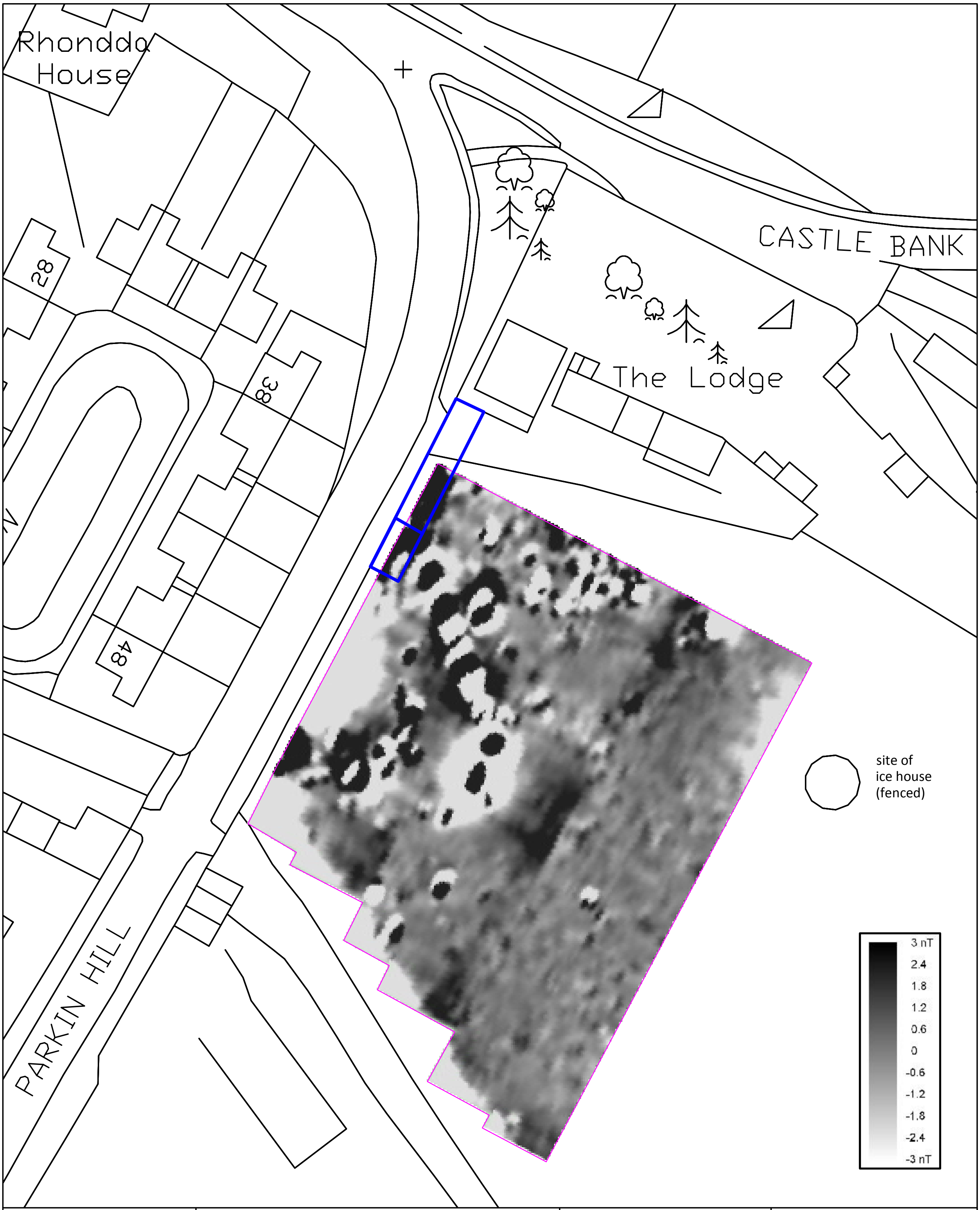
Figure 4: Geophysical survey at St Anne's Hospital showing test pit locations (TP1-3).



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CLIENT:	Appleby Archaeology Group
SCALE:	1:750 at A4
DRAWN BY:	MDR
CHECKED BY:	MDR
DATE:	May 2017
REPORT No:	DA001/Figure 5

KEY:

▭	Outline of geophysical survey area
▬	Outline of buildings shown on 1754 plan

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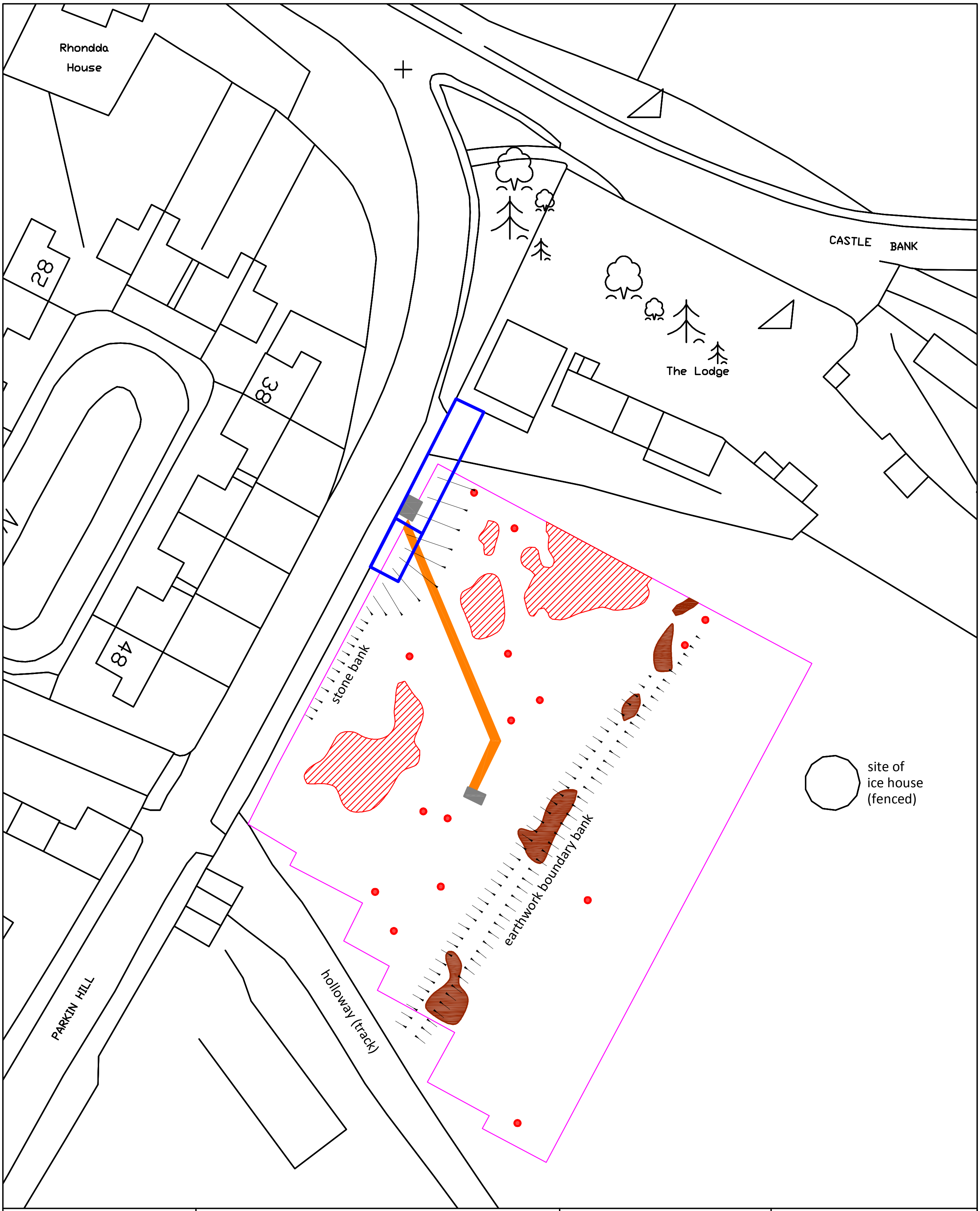
Figure 5: Geophysical survey at Castle Bank showing buildings on Hill's 1754 Plan.



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2017

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CLIENT:	Appleby Archaeology Group
SCALE:	1:750 at A4
DRAWN BY:	MDR
CHECKED BY:	MDR
DATE:	May 2017
REPORT No:	DA001/Figure 6

KEY:

- ☐ Outline of geophysical survey area
- ■ Dipolar anomalies: Concrete slabs
- 🟥 ▨ Dipolar anomalies: Fired/ferrous materials
- ■ Positive anomalies: Bank deposits
- 🟧 Bipolar anomaly: Service/water pipe
- ⫶ earthwork banks

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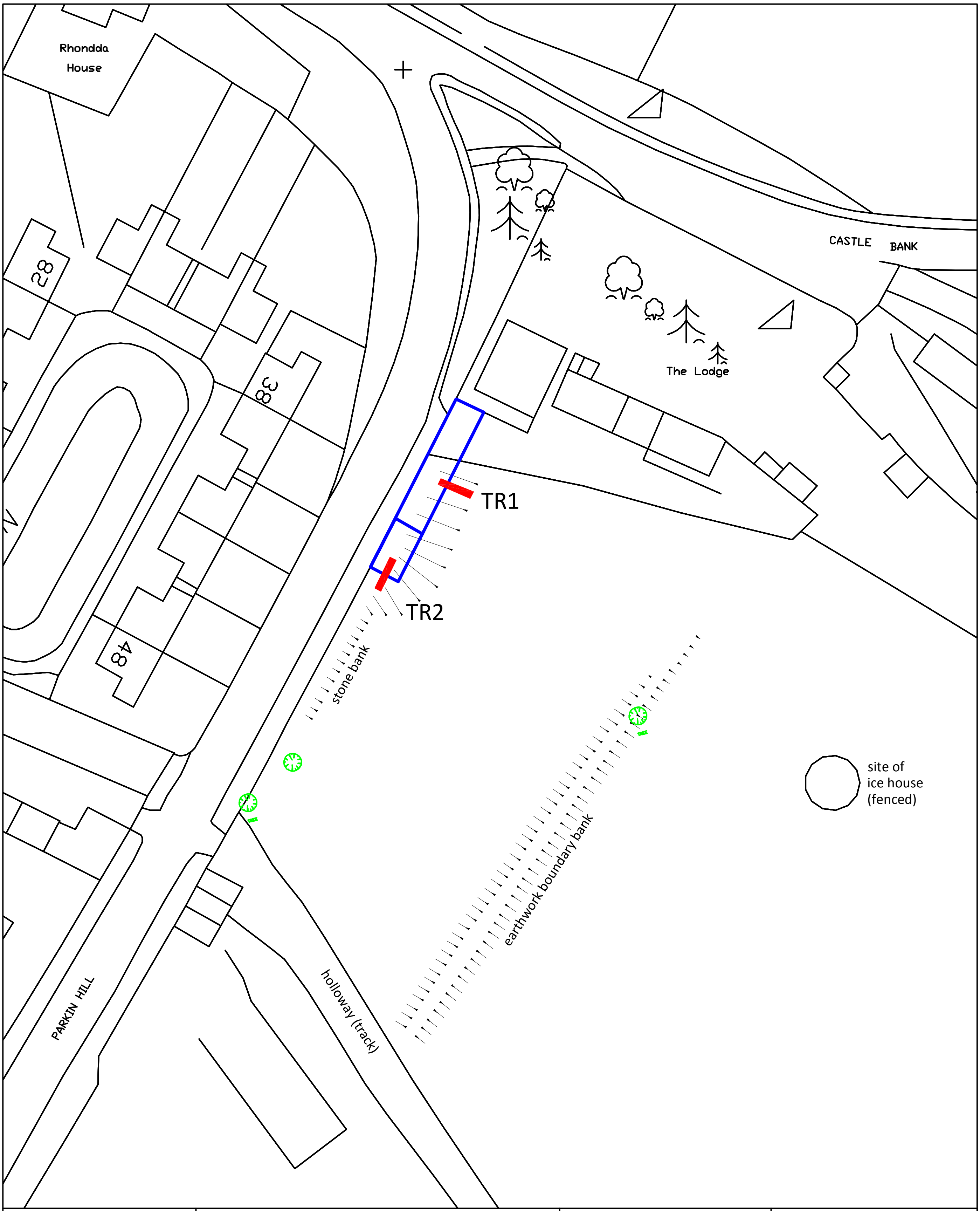
Figure 6: Interpretation of the geophysical survey showing location of buildings on Hill's 1754 Plan (in blue).



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PROJECT: Dig Appleby - Breaking the Ground, Appleby-in-Westmorland, Cumbria
CLIENT: Appleby Archaeology Group
SCALE: 1:750 at A4
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CHECKED BY: MDR
DATE: May 2017
REPORT No: DA001/Figure 7

KEY:
🟥 Trench location
╎╎╎ Earthwork banks
▭ Outline of buildings shown on 1754 plan
● Trees

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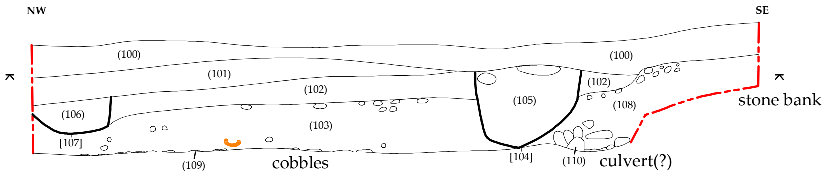
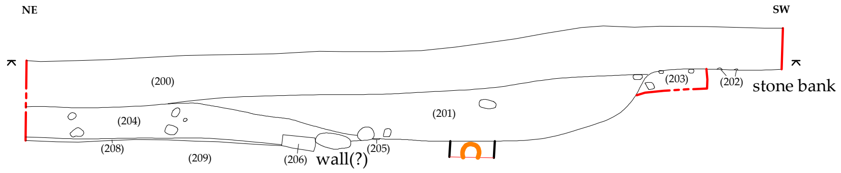
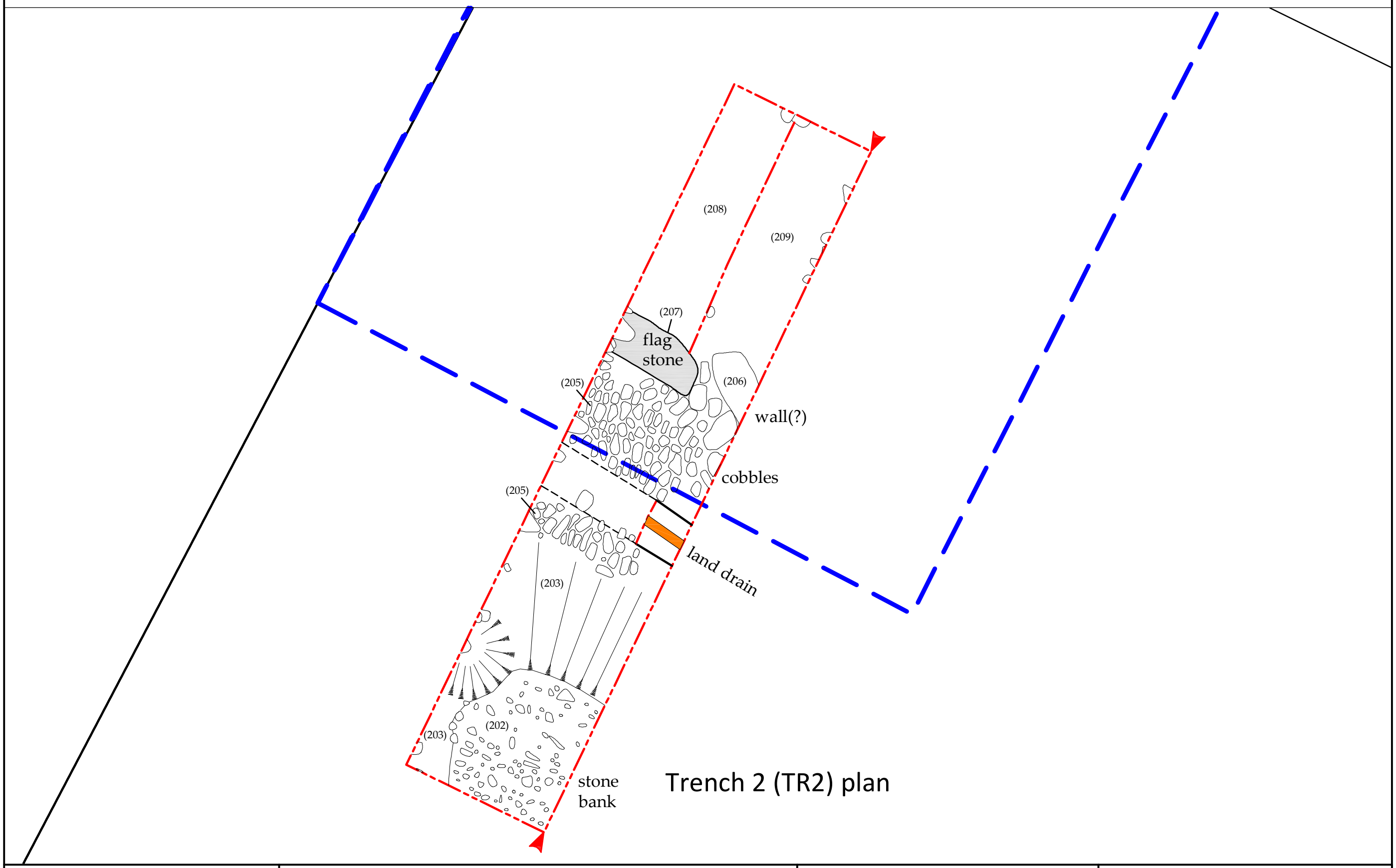
Figure 7: Locations of trenches (TR1 & TR2) showing buildings on Hill's 1754 Plan (in blue).



Trench 1 (TR1) southwest-facing section



Trench 2 (TR2) northwest-facing section



Trench 2 (TR2) plan

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DATE: May 2017
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KEY:
- Limit of excavation
- Land drains
- Outline of buildings shown on 1754 plan
- Section location

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Figure 8: Trench plan and sections (TR1 & TR2).